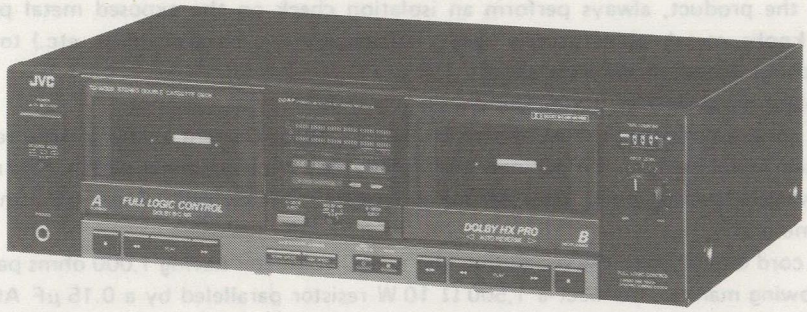
JVC

SERVICE MANUAL

STEREO DOUBLE CASSETTE DECK

TD-W303A/B/C/E/G/J/U



Area suffix

A	Australia
B	U.K.
C	Canada
E	Continental Europe
G	W. Germany
J	U.S.A.
U	Other Areas

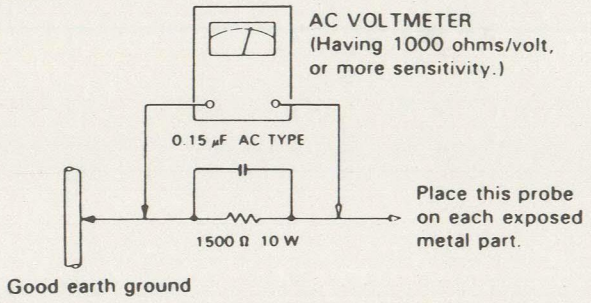
Contents

		Page
1	Safety Precautions	2
2	Safety Precaution about TD-W303	3
3	Specifications	4
4	Instruction Book (Extract)	6
5	Location of Main Parts	10
6	Removal of Main Parts	12
7	Main Adjustments	15
8	Block Diagram	21
9	Standard Schematic Diagram	22
10	Wiring Connections	24
11	Location of P.C. Board Parts and Parts List	25
12	Exploded View of Enclosure Component Parts and Parts List	30
13	Exploded View of Mechanism Component Parts and Parts List	32
14	Packing Illustration and Packing Parts List	37
15	Accessories	Back cover

No. 4314
February 1990

1 Safety Precautions

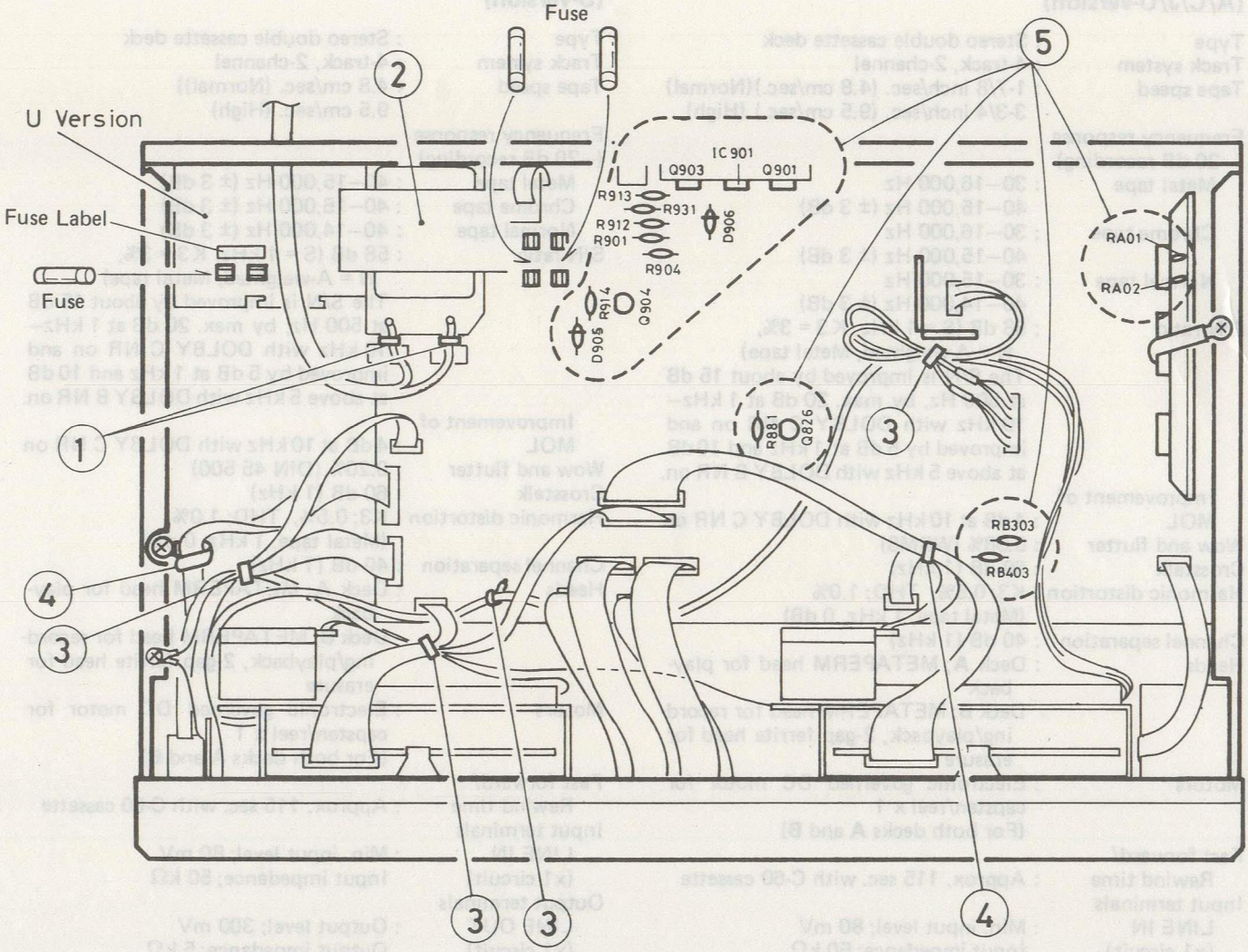
1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by (⚠) on the Schematic Diagram and Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 μF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground

Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

2 Safety Precaut; on about TD-W203



1. Connected points of the power cord tabs are fastened at two places to prevent them from touching the P.C. board.
2. The specified power transformer is as follows:
   J version: UZ approved No. 5216504
   C version: VTP52A3-011F
   They must be tightly fixed to the P.C. board.
3. CP jumping wires and the like are tightly bound at the illustrated point to avoid touching the primary circuit and heating parts.
4. Must be bound tightly at this point to avoid touching the mechanism driving parts and exposed primary circuits.
5. Be careful of the following parts not to contact wires since they are heating parts.
   D905, D906, Q901, Q903, Q904, IC901, R901, R904, R912, R913, R914, R931, R881, Q826, RA01, RA02

3 Specifications

(A/C/J/U-version)

Type	: Stereo double cassette deck
Track system	: 4-track, 2-channel
Tape speed	: 1-7/8 inch/sec. (4.8 cm/sec.)(Normal) 3-3/4 inch/sec. (9.5 cm/sec.) (High)
Frequency response (–20 dB recording)	
Metal tape	: 30–16,000 Hz 40–15,000 Hz (± 3 dB)
Chrome tape	: 30–16,000 Hz 40–15,000 Hz (± 3 dB)
Normal tape	: 30–15,000 Hz 40–14,000 Hz (± 3 dB)
S/N ratio	: 58 dB (S = 1 kHz, K3 = 3%, N = A-weighted, Metal tape) The S/N is improved by about 15 dB at 500 Hz, by max. 20 dB at 1 kHz–10 kHz with DOLBY C NR on and improved by 5 dB at 1 kHz and 10 dB at above 5 kHz with DOLBY B NR on.
Improvement of MOL	: 4 dB at 10 kHz with DOLBY C NR on
Wow and flutter	: 0.08% (WRMS)
Crosstalk	: 60 dB (1 kHz)
Harmonic distortion	: K3; 0.5%, THD; 1.0% (Metal tape, 1 kHz, 0 dB)
Channel separation	: 40 dB (1 kHz)
Heads	: Deck **A**; METAPERM head for playback Deck **B**; METAPERM head for recording/playback, 2-gap ferrite head for erasure
Motors	: Electronic governed DC motor for capstan/reel x 1 (For both decks **A** and **B**)
Fast forward/ Rewind time	: Approx. 115 sec. with C-60 cassette
Input terminals	
LINE IN (x1 circuit)	: Min. input level; 80 mV Input impedance; 50 kΩ
Output terminals	
LINE OUT (x1 circuit)	: Output level; 300 mV Output impedance; 5 kΩ
PHONES x 1	: Output level; 0.3 mW/8 Ω Matching impedance; 8 Ω – 1 kΩ
Other terminals	: Remote (COMPU LINK-1) x 2
Power requirement	
A version	: AC 240 V, 50/60 Hz
C/J version	: AC 120 V, 60 Hz
U version	: AC 230/127/110 V, 50/60 Hz
Power consumption	: With power on; 17 W With power switch standby; 1.5 W
Dimensions (W x H x D)	: 435 x 123 x 288 mm (17-3/16" x 4-7/8" x 11-3/8")
Weight	: 4.4 kg (9.8 lbs)
Accessories	: Pin plug cord . . . . . 2 Remote cable 1

Design and specifications are subject to change without notice.

(B-version)

Type	: Stereo double cassette deck
Track system	: 4-track, 2-channel
Tape speed	: 4.8 cm/sec. (Normal)) 9.5 cm/sec. (High)
Frequency response (–20 dB recording)	
Metal tape	: 40–15,000 Hz (± 3 dB)
Chrome tape	: 40–15,000 Hz (± 3 dB)
Normal tape	: 40–14,000 Hz (± 3 dB)
S/N ratio	: 58 dB (S = 1 kHz, K3 = 3%, N = A-weighted, Metal tape) The S/N is improved by about 15 dB at 500 Hz, by max. 20 dB at 1 kHz–10 kHz with DOLBY C NR on and improved by 5 dB at 1 kHz and 10 dB at above 5 kHz with DOLBY B NR on.
Improvement of MOL	: 4 dB at 10 kHz with DOLBY C NR on
Wow and flutter	: 0.20% (DIN 45 500)
Crosstalk	: 60 dB (1 kHz)
Harmonic distortion	: K3; 0.5%, THD; 1.0% (Metal tape, 1 kHz, 0 dB)
Channel separation	: 40 dB (1 kHz)
Heads	: Deck **A**; METAPERM head for playback Deck **B**; METAPERM head for recording/playback, 2-gap ferrite head for erasure
Motors	: Electronic governed DC motor for capstan/reel x 1 (For both decks **A** and **B**)
Fast forward/ Rewind time	: Approx. 115 sec. with C-60 cassette
Input terminals	
LINE IN (x1 circuit)	: Min. input level; 80 mV Input impedance; 50 kΩ
Output terminals	
LINE OUT (x1 circuit)	: Output level; 300 mV Output impedance: 5 kΩ
PHONES x 1	: Output level; 0.3 mW/8 Ω Matching impedance; 8 Ω – 1 kΩ
Other terminals	: Remote (COMPU LINK-1) x 2
Power requirement	: AC 240 V, 50/60 Hz
Power consumption	: With power on; 17 W With power switch standby; 1.5 W
Dimensions (W x H x D)	: 435 x 123 x 288 mm
Weight	: 4.4 kg
Accessories	: Pin plug cord . . . . . 2 Remote cable 1

Design and specifications are subject to change without notice.

(Version E)

Type : Double-platine à cassettes stéréo
Système de pistes : 4 pistes, 2 canaux
Vitesse de défilement : 4,8 cm/sec. (Normale)
9,5 cm/sec. (Grande)

Réponse en fréquence
(Enregistrement à –20 dB)
- Bande "métal" : 30 à 16.000 Hz (DIN 45 500)
  40 à 15.000 Hz (± 3 dB)
- Bande chrome : 30 à 16.000 Hz (DIN 45 500)
  40 à 15,000 Hz (± 3 dB)
- Bande normale : 30 à 15.000 Hz (DIN 45 500)
  40 à 14.000 Hz (± 3 dB)

Rapport signal/bruit : 58 dB (DIN 45 500, Bande "métal")
Le rapport S/B est amélioré de 15 dB environ à 500 Hz, de 20 dB maximum à 1 kHz–10 kHz avec le DOLBY C NR en circuit, et amélioré de 5 dB à 1 kHz et 10 dB environ à 5 kHz avec le DOLBY B NR en circuit.

Amélioration de niveau de sortie max. : 4 dB à 10 kHz avec le DOLBY C NR en circuit

Pleurage et scintillement: 0,20% (DIN 45 500)
Diaphonie : 60 dB (1 kHz)
Distorsion harmonique: K3; 0,5% , THD; 1,0%
(band "métal", 1 kHz, 0 dB)
Séparation du canal : 40 dB (1 kHz)
Têtes : Magnetophone A; Tête METAPERM pour la lecture
Magnetophone B; Tête METAPERM pour enregistrement/lecture, tête de ferrite à double entrefer pour l'effacement
Moteurs : Moteur CC à asservissement électronique pour le cablestan/bobine x 1 (pour les deux magnetophones A et B)

Temps d'avance rapide/
Temps de réembobinage: Environ 115 secondes, avec une cassette C-60

Bornes d'entrée
- LINE IN (x1 circuit) : Niveau d'entrée minimum; 80 mV
  Impédance d'entrée; 50 kΩ

Bornes de sortie
- LINE OUT (x1 circuit) : Niveau de sortie; 300 mV
  Impédance de sortie; 5 kΩ
- PHONES x 1 : Niveau de sortie; 0,3 mW/8 Ω
  Impédance caractéristique; 8 Ω–1 kΩ

Autre prise : Télécommande (COMPU LINK-1) x 2
Alimentation : 220 V CA, 50/60 Hz
Consommation : 17 W avec l'alimentation en circuit
1,5 W avec l'alimentation hors circuit
Dimensions (L x H x P) : 435 x 123 x 228 mm
Poids : 4,4 kg

Accessoires : Câble à broches 2
Câble de télécommande 1

Présentation et caractéristiques modifiables sans préavis.

(G-Version)

Typ : Stereo-Doppel-Cassettendeck
Spursystem : 4-Spur, 2-Kanal
Bandgeschwindigkeit : 4,5 cm/Sek. (Normal)
9,5 cm/Sek. (Hoher)

Frequenzgang
(–20 dB-Aufnahme)
- Metallband : 30–16.000 Hz (DIN 45 500)
  40–15.000 Hz (± 3 dB)
- Chromband : 30–16.000 Hz (DIN 45 500)
  40–15.000 Hz (± 3 dB)
- Normalband : 30–15.000 Hz (DIN 45 500)
  40–14.000 Hz (± 3 dB)

Signal-Rauschabstand : 58 dB (DIN 45 500, Metallband)
Der Rauschspannungsabstand ist um 15 dB bi 500 Hz, um max. 20 dB bei 1 kHz–10 kHz mit DOLBY C NR verbessert und um 5 dB bei 1 kHz und um 10 dB über 5 kHz mit eingeschaltetem DOLBY B NR verbessert.

Verbesserung des Höchstausgangspegels: 4 dB bei 10 kHz mit eingeschaltetem DOLBY C NR

Gleichlaufschwankungen: 0,20% (DIN 45 500)
Übersprchdämpfung : 60 dB (1 kHz)
Klirrgrad : K3; 0,5% , THD; 1,0%
(Metallband, 1 kHz, 0 dB)
Kanaltrennung : 40 dB (1 kHz)
Köpfe : Deck A; METAPERM-Kopf (für Wiedergabe)
Deck B; METAPERM-Kopf (für Aufnahme/Wiedergabe), 2-Spalt-Ferritkopf für Löschen
Motoren : Elektronisch gesteuerter Gleichstrommotor für Capstan/Spule x 1
(für beide Decks A und B)

Schnellvorlaufzeit/
Rückspulzeit : Ca. 115 Sekunden (C-60 Cassette)

Eingänge
- LINE IN (x1 Schaltung) : Minimaler Eingangspegel; 80 mV
  Eingangsimpedanz; 50 kΩ

Ausgänge
- LINE OUT (x1 Schaltung) : Ausgangspegel; 300 mV
  Ausgangsimpedanz; 5 kΩ
- PHONES x 1 : Ausgangspegel; 0,3 mW/8 Ω
  Passende Impedanz; 8 Ω – 1 kΩ
- DIN-Buchse : Min. Eingangspegel; 0,1 mV/kΩ
  Eingangsimpedanz; 10 kΩ
  Ausgangspegel; 0,3 V
  Ausgangsimpedanz; 5 kΩ

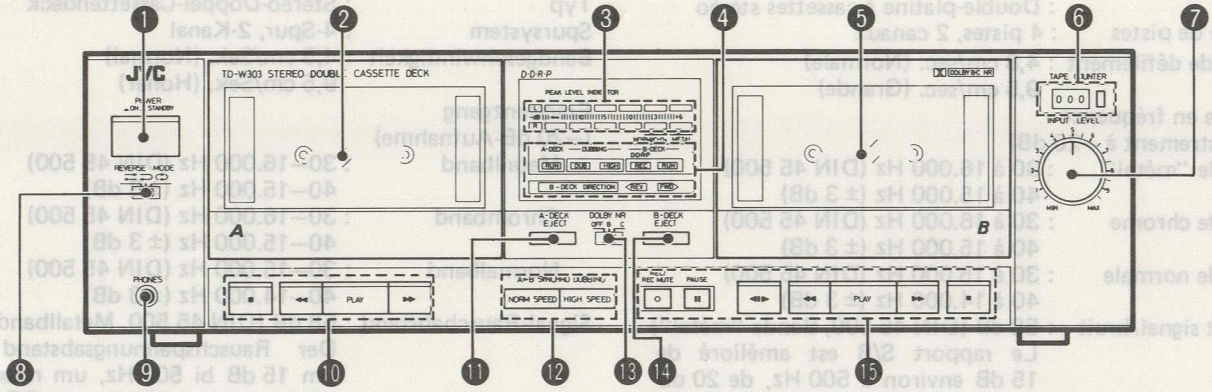
Weitere Anschlüsse : Fernbegienung (COMPU LINK-1) x 2
Spannungsversorgung : Netz 220 V, 50/60 Hz
Leistungsaufnahme : 17 W bei Betrieb
1,5 W bei Betriebsbereitschaft
Abmessungen (B x H x T): 435 x 123 x 288 mm
Gewicht : 4,4 kg

Zubehör : Cynchkabel 2
Fernbedienkabel 1

Technische Änderungen vorbehalten!

4 Instruction Book (Extract)

NAMES OF PARTS AND THEIR FUNCTIONS



❶ **POWER switch**

❷ **Cassette holder (deck A)**

❸ **PEAK LEVEL INDICATOR**
These indicate the recording level during recording and output level during playback. The LED indication varies with the signal strength during recording and playback.

❹ **Indicators**
A-DECK
- **RUN:** Blinks when the tape is running in deck **A.**

DUBBING
- **DUB:** This lights to indicate that the unit is in the dubbing mode.
- **HIGH:** This lights when in the high-speed dubbing.

B-DECK
- **REC:** This lights when deck **B** is in the recording and record-pause modes; blinks when in the rec mute mode.
  When the DDRP signal is received, the green indicator lights. When DDRP recording is being performed, the indicator turns red.
  (When the DDRP signal is received after the deck is set to the rec-pause mode, the green indicator does not light.)
- **RUN:** Blinks when the tape is running in deck **B.**
  Lights when in the temporary pause mode.

B-DECK DIRECTION
- **REV:** Lights when the tape is running in the reverse direction.
- **FWD:** Lights when the tape is running in the forward direction.

❺ **Cassette holder (deck B)**

❻ **TAPE COUNTER and Reset button (deck B)**

❼ **INPUT LEVEL control**
Adjust the recording level with this control.

❽ **REVERSE MODE switch (deck B)**
Select single or full recording/playback mode, or continuous play mode.
⇆ : For a single-side recording or playback.
⇄ : To record or play sides A and B.
↻ : To play sides A and B continously.

❾ **PHONES jack**
Connect headphones (with an impedance of 8 Ω – 1 kΩ).

❿ **Cassette operation buttons (deck A)**
■ **(stop):** Press to stop the tape. (The tape automatically stops when it reaches the end.)
◀◀ **(rewind):** Press to rewind the tape.
PLAY: Press to play the tape.
▶▶ **(fast forward):** Press to fast forward the tape.

⓫ **A-DECK EJECT button**
Press to open the cassette holder of deck **A.**

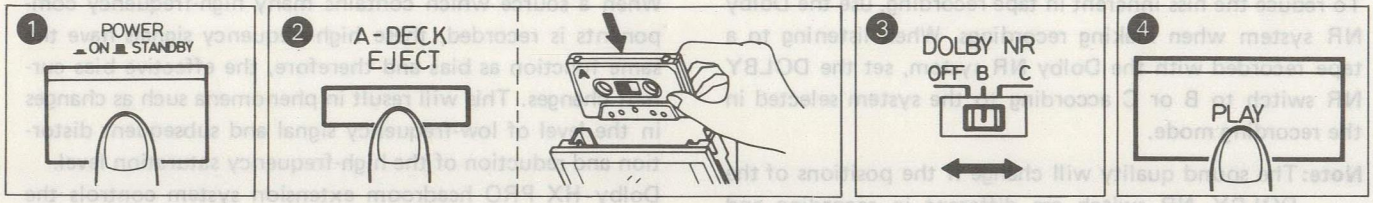
⓬ **A ▶ B SYNCHRO DUBBING button**
Press to dub from deck **A** to deck **B.**
- **NORM SPEED:** Press to perform normal-speed dubbing.
- **HIGH SPEED:** Press to perform high-speed dubbing.

⓭ **DOLBY NR switch**
Set to B or C for recording using the Dolby NR system or for playing back a tape that was recorded using the Dolby NR system. Set to OFF when the Dolby NR system is not used.

⓮ **B-DECK EJECT button**
Press to open the cassette holder of deck **B.**

⓯ **Cassette operation buttons (deck B)**
○**REC/REC MUTE:** Press the PLAY button while pressing this button for recording, and press to leave an appropriate non-recorded section.
II PAUSE: Press to stop the tape temporarily during recording and playback.
Press the PLAY button to release the pause mode.
◀▮▶ **(direction):** Press to change the direction of tape travel.
◀◀ : Press to fast wind the tape from right to left.
PLAY: Press to play back or record the tape.
▶▶ : Press to fast wind the tape from left to right.
■ **(stop):** Press to stop the tape. Also press to stop both decks simultaneously during dubbing.

PLAYBACK



Playback of deck A

– Operate in the order of the numbers in the illustration –

1. Press the POWER switch to set to ON ( ).
2. Load a prerecorded cassette. (deck **A**)
3. Set the DOLBY NR switch to the same position as when the tape was recorded.
4. Press the PLAY button of deck **A** to start playback.

Playback of deck B

Perform steps 2 to 4 of the above procedure for deck **B.**

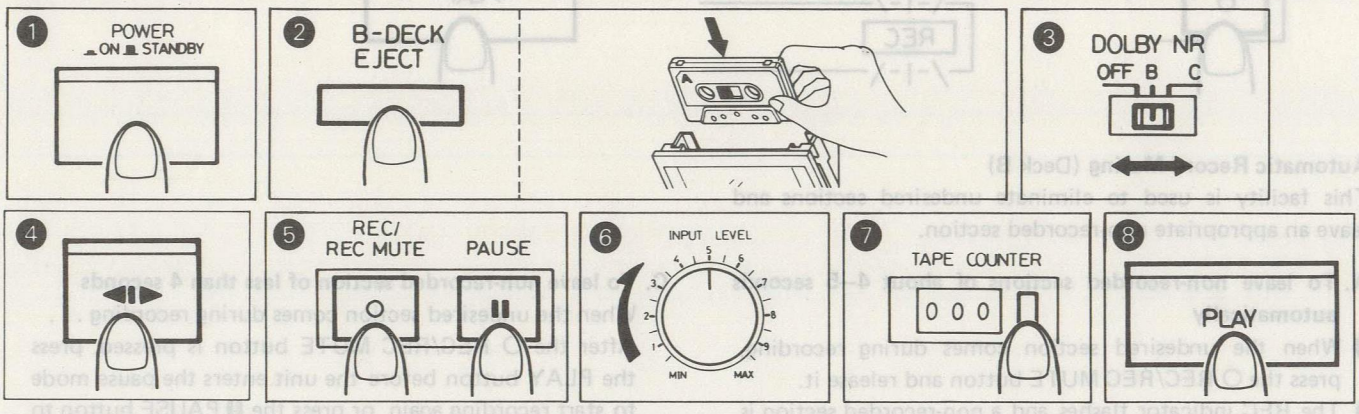
Continuous play

First set the REVERSE MODE switch to . Load cassette tapes in both decks and press the PLAY button of the deck to be played first for continous play of both decks. While one deck is playing back, the cassette in the other one can be replaced. This is convenient to the long-time playback of background music.

- When one side of the tape in deck **A** has been played, the deck enters the auto rewind mode and then the standby mode when the tape has been fully rewound.
- Press the ■ (stop) button of the deck that is running to stop continous play.

Note: Use tapes recorded using the same NR mode in decks **A** and **B.**

RECORDING



Deck B only

– Operate in the order of the numbers in the illustration –

1. Press the POWER switch to set to ON ( ).
2. Load a cassette for recording.
3. Set the DOLBY NR switch as required.
4. Select the side to be recorded.
5. Press the ❚❚ PAUSE button and ○ REC/REC MUTE button simultaneously (record-pause mode). The REC and RUN indicators light.
6. Adjust the recording level.
7. Press to "000".
8. Press the PLAY button to start recording.
   When DDRP recording is performed with a suitable JVC CD player, the recording level is adjusted automatically when the DDRP button of the CD player is pressed, after which recording starts.

WARNING

It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.

Erasing

When recording on a prerecorded tape, the previous recording is automatically erased and only the new program is recorded on the tape.

To erase a tape without making a new recording . . .

Follow the section "RECORDING" but in step 6 set the INPUT LEVEL control to MIN.

Dolby NR System

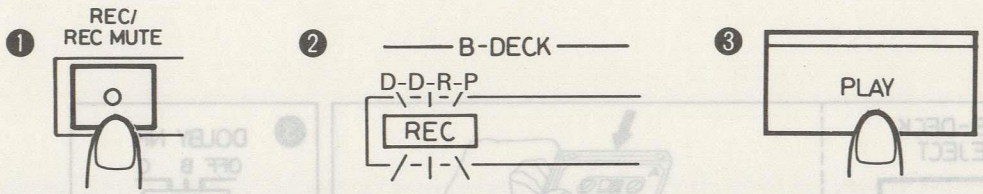
To reduce the hiss inherent in tape recording, use the Dolby NR system when making recordings. When listening to a tape recorded with the Dolby NR system, set the DOLBY NR switch to B or C according to the system selected in the recording mode.

Note: The sound quality will change if the positions of the DOLBY NR switch are different in recording and playback.
When the DOLBY NR switch is set to B or C, the MPX filter is activated.

Dolby HX PRO headroom extension

When a source which contains many high-frequency components is recorded, these high-frequency signals have the same function as bias and therefore, the effective bias current changes. This will result in phenomena such as changes in the level of low-frequency signal and subsequent distortion and reduction of the high-frequency saturation level.
Dolby HX PRO headroom extension system controls the bias current so that the effective bias is constant even when there are fluctuations in the high-frequency components of the input signal. This greatly improves the high-frequency saturation level while reducing the low-frequency signal level variations and distortion.

- The dynamic sound recorded with this system sounds the same even when the tape is played back in a deck that does not have Dolby HX PRO.
- This system automatically works when in recording; however, Dolby HX PRO is not a noise reduction system.



Automatic Record Muting (Deck **B**)

This facility is used to eliminate undesired sections and leave an appropriate non-recorded section.

A. To leave non-recorded sections of about 4–5 seconds automatically

1. When the undesired section comes during recording, press the ○ REC/REC MUTE button and release it.
2. The REC indicator flashes and a non-recorded section is made during record muting operation.
   About 4–5 seconds later, the tape automatically stops, and the unit enters the record-pause mode.
3. Press the PLAY button to start recording again.

B. To leave non-recorded sections of more than 4–5 seconds

1. Keep the ○ REC/REC MUTE button pressed continuously as long as you want to make a non-recorded section.
   By releasing the finger from the button after the above operation, the unit enters the record-pause mode.
2. Press the PLAY button to start recording again.

C. To leave non-recorded section of less than 4 seconds

When the undesired section comes during recording . . .
After the ○ REC/REC MUTE button is pressed, press the PLAY button before the unit enters the pause mode to start recording again, or press the ❚❚ PAUSE button to enter the record-pause mode.

- The PEAK LEVEL INDICATOR lights even during record muting according to the input level which can be heard from the speakers or headphones so that recording can be resumed at the exact point on the tape.

COMPU LINK CONTROL SYSTEM

This is a convenient system which has been originated and developed by JVC. The following are the brief explanations of its major performances:

Automatic Source Selection

When the provided remote cables are used for connecting this unit to other components which have COMPU LINK-1 terminals the switchover of all system components is possible with simple one-touch of the source selector button of JVC's amplifier or receiver. By doing this, the corresponding component will start playing automatically. The source select button of the remote control unit or the activation button of the desired component can be also used for this purpose.

When the components have been switched over, the previous component will stop playing within five seconds.

Synchronized Recording

Synchronized recording refers to the process in which the deck starts recording in synchronism with the CD player. Perform the synchronized recording as follows:

1. Set the cassette deck to the record-pause mode in accordance with the recording procedures on page 19.
2. If you want the programmed recording, program the desired tunes in any order you wish to hear.
3. Press the PLAY/PAUSE button of the CD player. By so doing, the cassette deck is placed in the record mode and synchronized with the CD player for recording. Synchronized recording thus can be made possible.

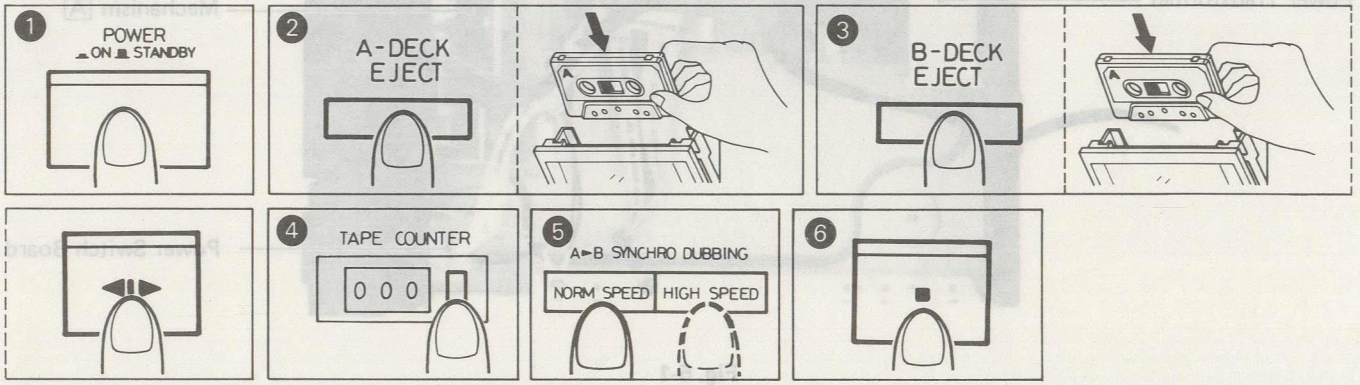
DDRP (Dynamics Detection Recording Processor) Recording

The DDRP function makes possible fully automatic recording when used with a suitable JVC CD player. When the DDRP button of a suitable JVC CD player is pressed, the recording level is first adjusted automatically, then recording starts; it is not necessary to start recording by the normal procedure.

Notes:

- Synchronized recording or DDRP recording stops automatically when the CD player stops playing.
- To cancel synchronized recording or DDRP recording, press the STOP button of the CD player or cassette deck.
- Synchronized recording does not start except when the record-pause mode is set by simultaneously pressing the ○ REC/REC MUTE and ❚❚ PAUSE buttons in the stop mode.
- The source is locked to the CD position during synchronized recording or DDRP recording to avoid accidental stops or switchover to another component. To switch over the components, cancel synchronized recording or DDRP recording first.
- When one deck is in the recording mode, even if the other deck is set to the record-pause mode, synchronized recording does not start.
- The INPUT LEVEL control does not function during DDRP recording.

DUBBING



- **Synchro dubbing**

1. Press the POWER switch to ON (⏏).
2. Insert a pre-recorded cassette into deck **A**.
3. Insert the blank tape with side A facing out into deck **B**, and press the ◂▮▸ (direction) button to select the side to be recorded.
4. Push the counter reset button to reset to "000".
5. Press the SYNCHRO DUBBING (NORM or HIGH SPEED) button to start dubbing.
6. Press the ■ (stop) button of deck **B** to stop dubbing.

   When deck **B** stops, the dubbing mode is automatically released.

- **Synchro record muting**

When deck **A** stops or enters any mode other than the playback mode during dubbing, deck **B** enters the record mute operation automatically and then enters the record-pause mode.

- **Before pressing the SYNCHRO DUBBING button**

Confirm that deck **B** is in the stop mode before starting dubbing.

5 Location of Main Parts

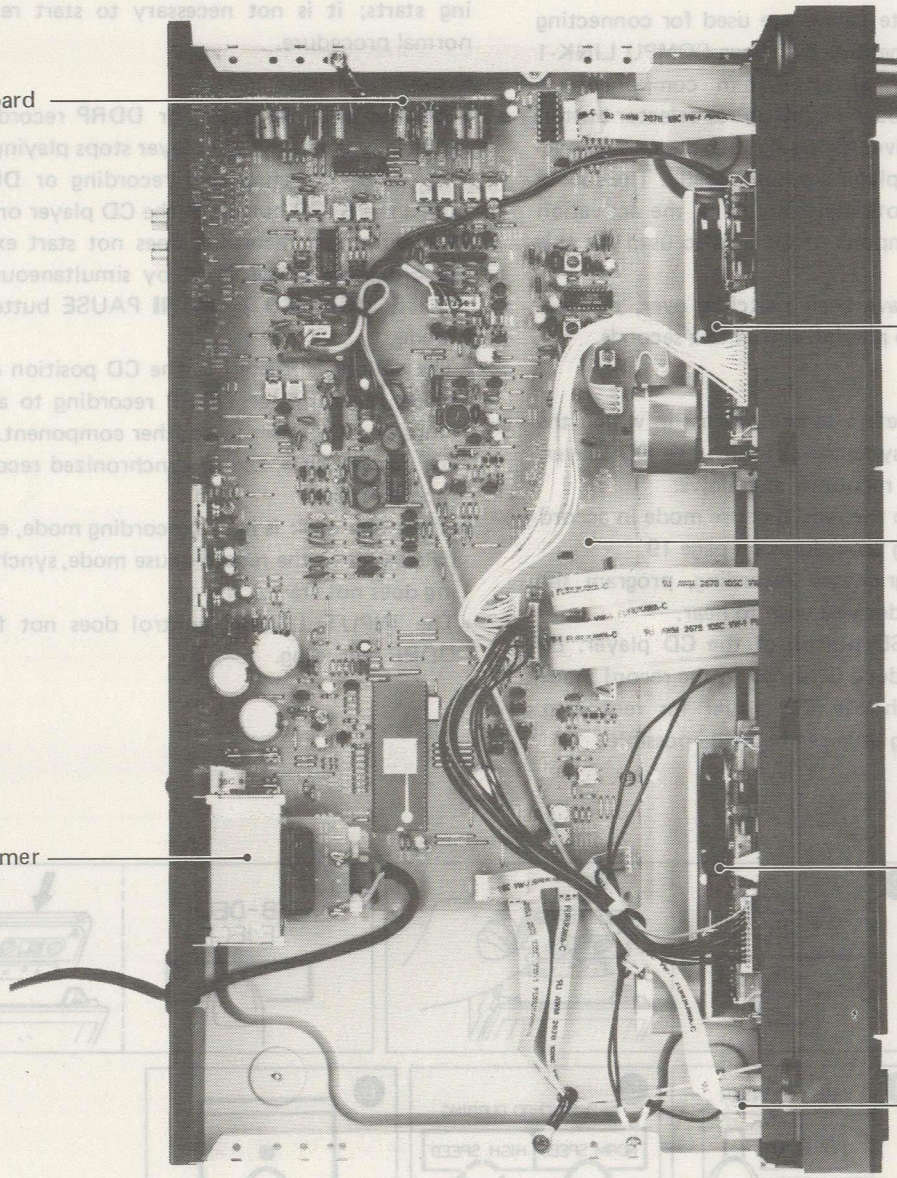


Fig. 5-1

■ [A] Mechanism Sections

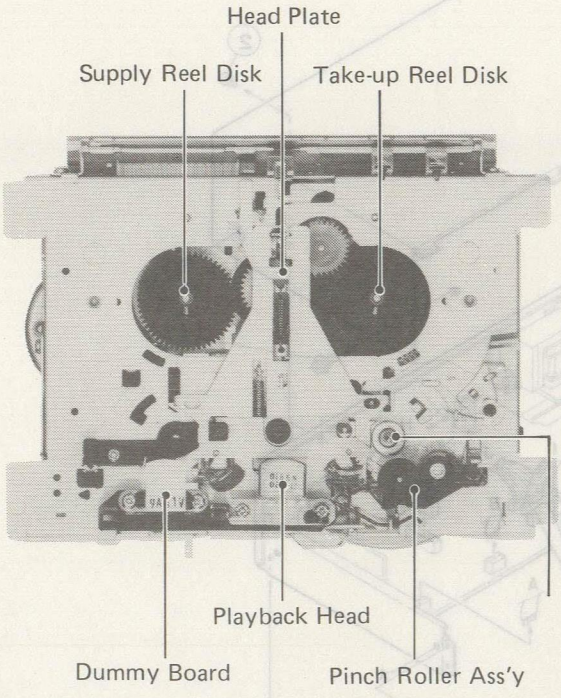


Fig. 5-2

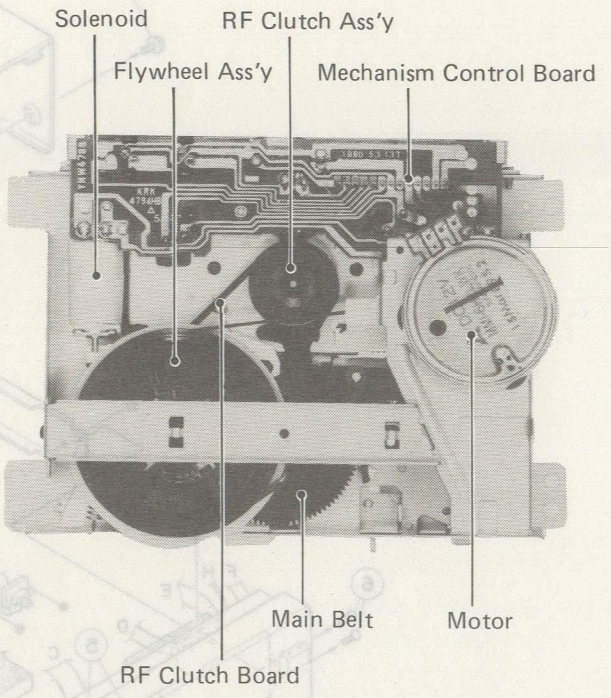


Fig. 5-3

■ [B] Mechanism Sections

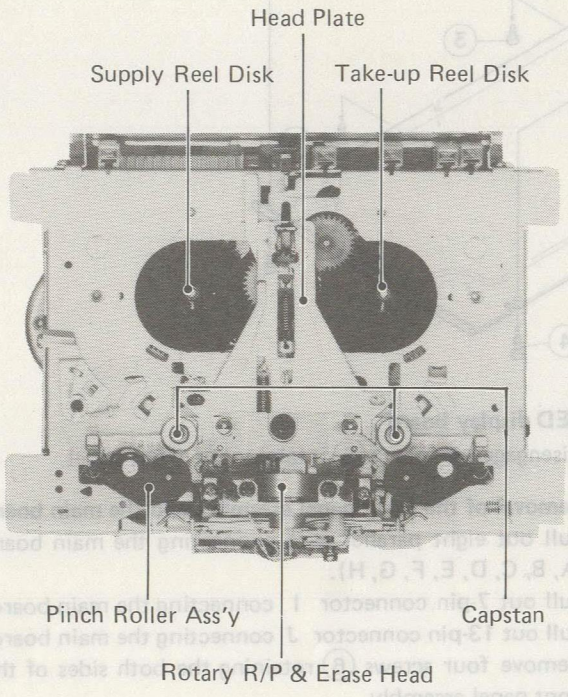


Fig. 5-4

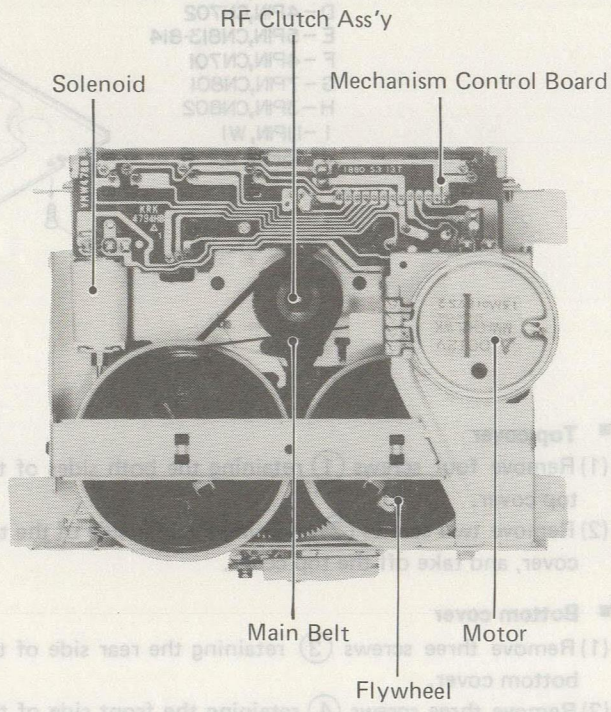


Fig. 5-5

6 Removal of Main Parts

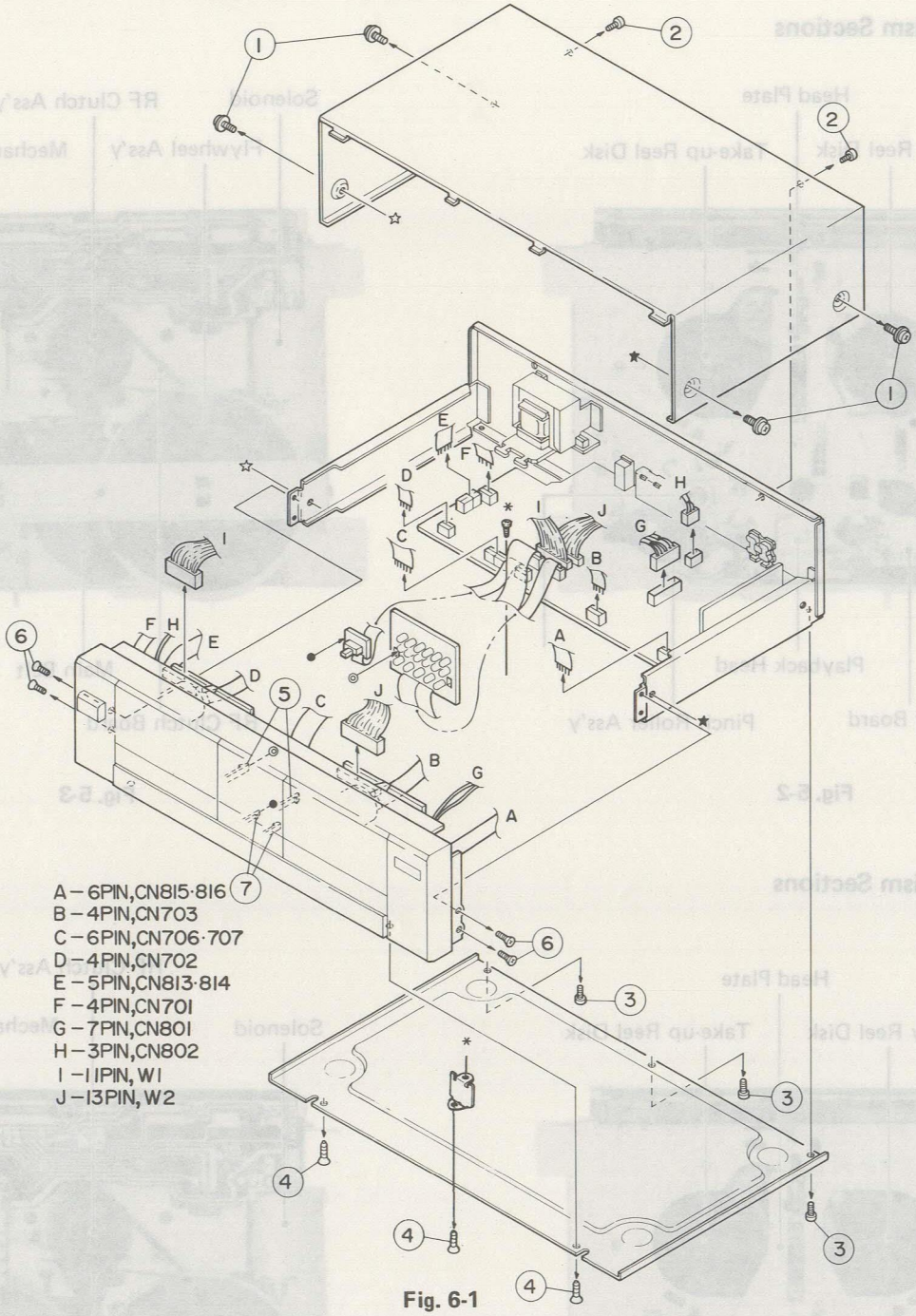


Fig. 6-1

■ **Top cover**

(1) Remove four screws (1) retaining the both sides of the top cover.

(2) Remove two screws (2) retaining the rear side of the top cover, and take off the top cover.

■ **Bottom cover**

(1) Remove three screws (3) retaining the rear side of the bottom cover.

(2) Remove three screws (4) retaining the front side of the bottom cover, and take off the bottom cover.

■ **LED display board**

Disengage two pawls (5) retaining the front panel.

■ **Removal of the front panel assembly and the main board**

(1) Pull out eight parallel wire connecting the main board (A, B, C, D, E, F, G, H).

(2) Pull out 7-pin connector I connecting the main board.

(3) Pull out 13-pin connector J connecting the main board.

(4) Remove four screws (6) retaining the both sides of the front panel assembly.

■ **DOLBY NR board**

Disengage two pawls (7) retaining the front panel.

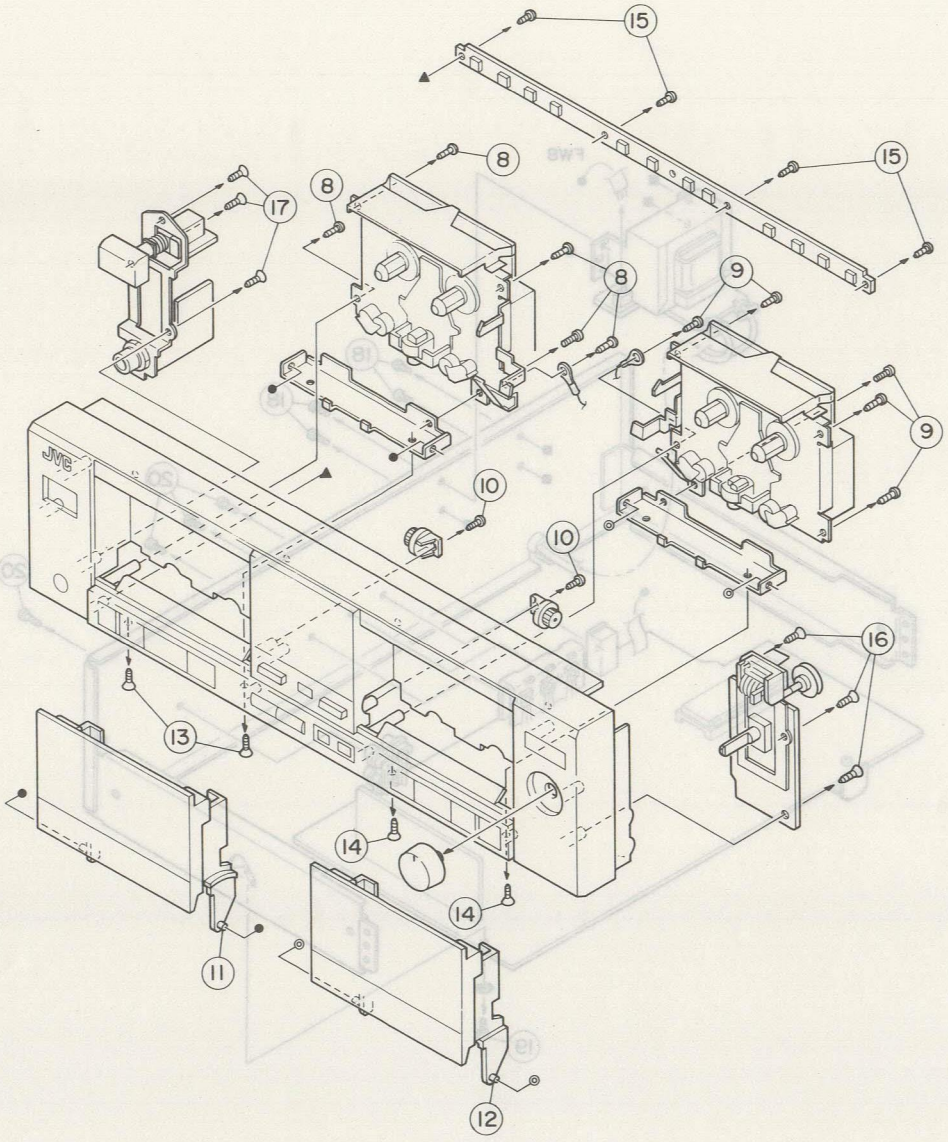


Fig. 6-2

■ **Mechanism assembly**

(1) Remove five screws (8) retaining the mechanism [A] assembly.

(2) Remove five screws (9) retaining the mechanism [B] assembly.

■ **Dump gear**

Remove two screws (10) retaining the both dump gears.

■ **Cassette holder assembly**

(1) Remove two arm shafts (11) from the left side cassette holder bracket.

(2) Take off the left side cassette holder.

(3) Remove two arm shafts (12) from the right side cassette holder bracket.

(4) Take off the right side cassette holder.

■ **Cassette holder bracket**

(1) Remove two screws (13) retaining the left side cassette holder bracket.

(2) Take off the cassette holder bracket.

(3) Remove two screws (14) retaining the right side cassette holder bracket.

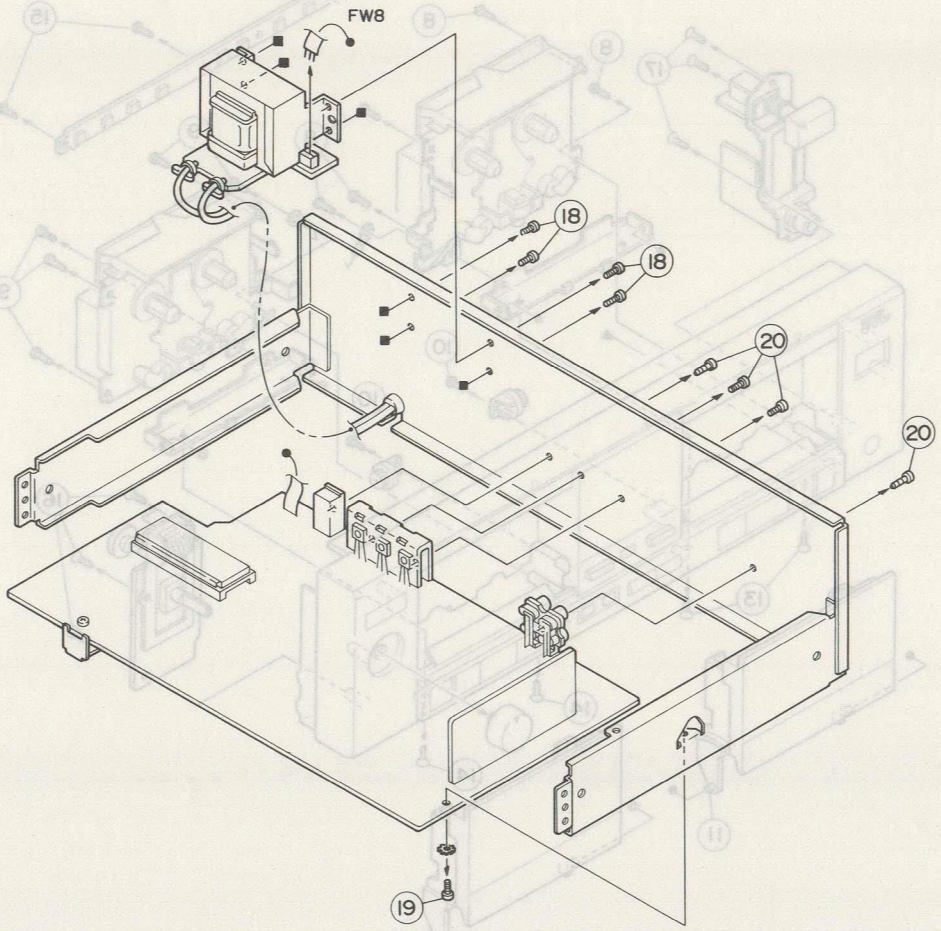


Fig. 6-3

■ **Operation switch board**

Remove four screws (15) retaining the operation switch board.

■ **Front panel assembly**

(1) Pull out the input level knob from the input level board.
(2) Remove four screws (16) retaining the input level board.
(3) Remove three screws (17) retaining the power switch board.

■ **Power transformer**

(1) Pull out the 3-pin parallel wire from the power transformer board.
(2) Remove four screws (18) retaining the power transformer.

■ **Main print circuit board**

(1) Remove the screw (19) retaining the main print circuit board from the right side bracket.
(2) Remove four screws (20) retaining the main print circuit board from the rear panel.

7 Main Adjustments

1. Measuring instruments required for adjustment

(1) Low-frequency oscillator (oscillation frequency 50 Hz–20 kHz, 0 dB output with 600 Ω impedance)
(2) Attenuator (600 Ω impedance)
(3) Electronic voltmeter
(4) Standard tapes
VTT712 (tape speed, wow & flutter measurements)
VTT724 (reference level)
TMT735, VTT739 (playback frequency)
TMT6447 (music scan)
TMT6448 (music scan)
VTT703 (10 kHz)
(5) Recording reference tapes
TS-12 or TS-8 (UD1), TS-10 or AC-513 (SA), TS-11 or AC-712 (MA) or equivalent
(Use the standard tapes specified by this department.)
(6) 600 Ω resistors (for attenuator matching)
(7) Distortion meter (bandpass filter)
(8) Torque gauge (cassette) for CTG-N mechanism adjustments
(9) Wow & flutter gauge
(10) Frequency counter
(11) M300 gauge
(12) Band pass filter

2. Mechanicam adjustment

After head replacements, use the following method to check after the height, direction and tilt (rough) of each head have been adjusted.

Tape travel adjustment
Use the M300 gauge.
Be sure not to damage the head.

Tape guide adjustment method

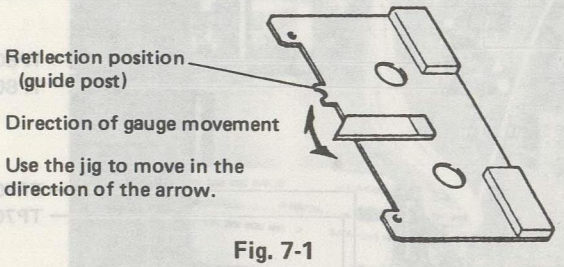
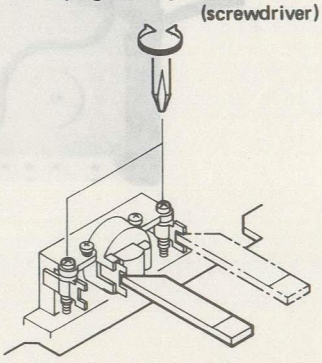
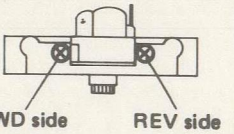


Fig. 7-1

Items	Tape to be used/ jig	Standard	Adjustment and checking method	Adjusting points
Tape transport adjustment	M300 gauge and C-90 tape	The tape should not be curled or stretched during travel. Note: Normally, the tape travel can only be adjusted at tape guide.	Adjust the tape guide heights so that the gauge passes through the guide smoothly. Confirm it both forward and reverse directions.	Refer to the illustration below. (Apply screw locking compound after adjustment.) Tape guide adjustment (screwdriver) 
Head azimuth adjustment (Both decks)	Test tape VTT703	Misalign the azimuth should be less than 1 dB to real align point.	Phase difference between channel L and R to be minimized (0) and output level to be maximized. Different output level between deck A and B should be within 2 dB. After adjustment, apply lock paint on the head azimuth align screws. Adjustment to be done to repeat changing direction.	 FWD side REV side

3. Electrical adjustments location

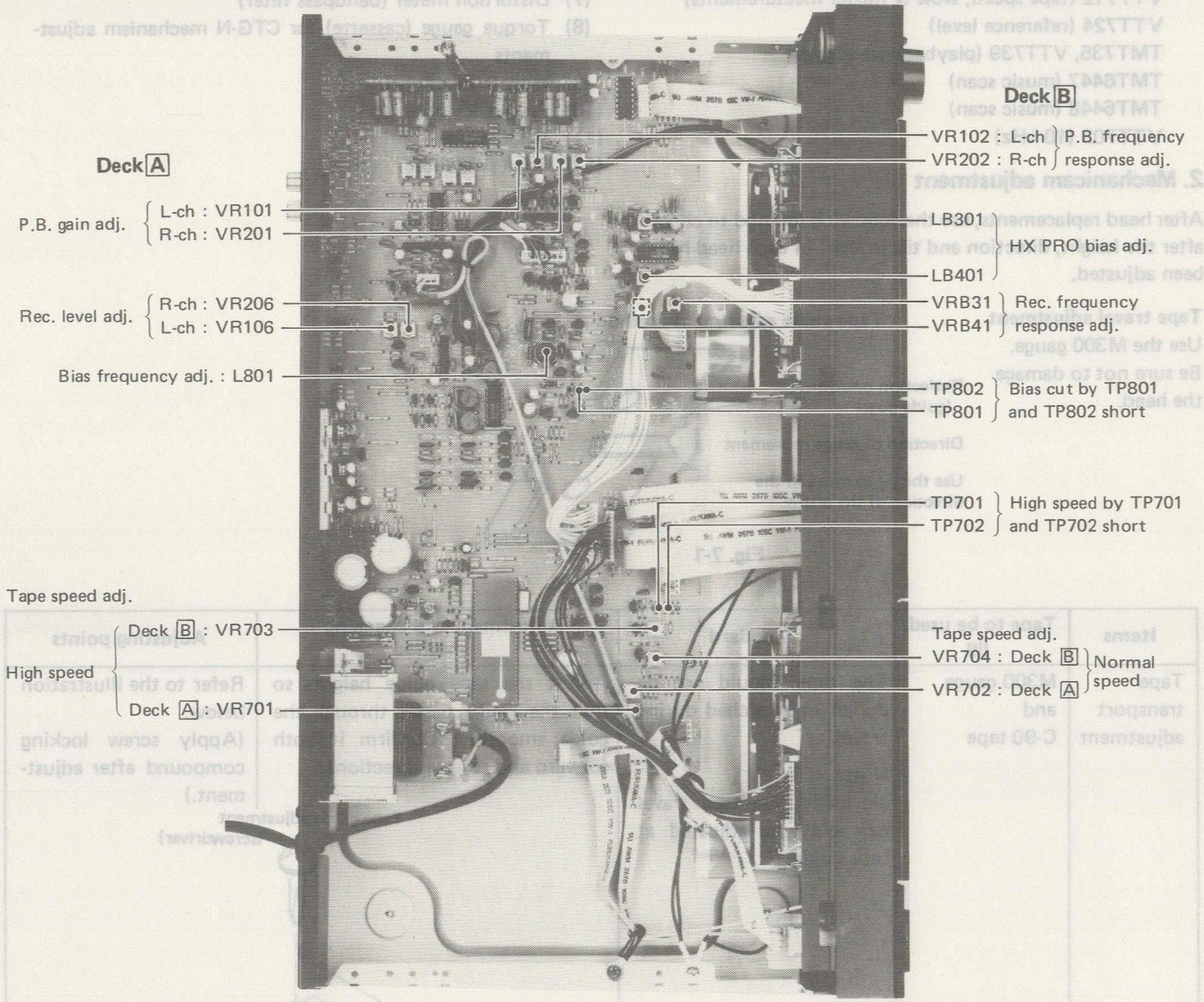


Fig. 7-2

Item	Adjustment	Adjusting point	Standard value	Remarks
Tape speed adjustment	Connect an electronic counter to the LINE OUT terminals. Play back the VTT712 test tape. After the High-speed adjustment, perform the Normal-speed adjustment. 1) Set the pitch control VR to the center detent position. 2) Adjust the normal speed of the deck [A] to 3000 ± 15 Hz with VR702 (VR-704 for the deck [B]). 3) Shortcircuit between TP701 and TP-702 for high-speed adjustment, and adjust VR701 and VR703 so that motor speed becomes 6000 ± 15 Hz at the forced high-speed.	Deck [A] NORM : VR702 HIGH : VR701 Deck [B] NORM : VR704 HIGH : VR703	NORM speed: 3000 ± 15 Hz HIGH speed: 6000 ± 15 Hz	**Note:** To set to the high-speed mode, make a short-circuit between TP701 and TP702.
Checking wow and flutter	Connect a wow and flutter meter to the LINE OUT terminals. Play back the VTT712 test tape.		Deck [A] & [B] Less than 0.11% (JIS WTD) TD-W303G Deck [A] & [B] Less than 0.15% (JIS WTD) Without TD-W303G	Test tape : VTT712 Frequency : 3 kHz Mode : Play In FWD and REV mode should be complied.
Checking playback torque	TW2111 (FWD), TW2121 (REV) Deck [A] and [B] Measure by the torque tape TW2111 (FWD), TW2121 (REV).		Should be within 30—70 gr-cm	If the standard torque is not obtained, replace the take-up disc assembly.
Checking fast forward/ rewind torque	Deck [A] and [B] Measure by the torque tape TW2231.		FF/REW torque should be within 55—160 gr-cm	

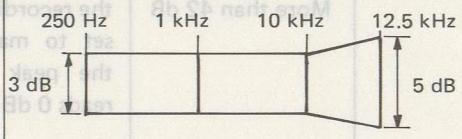
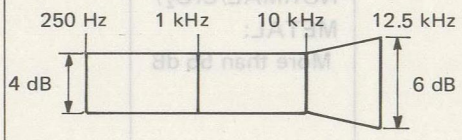
4. Electrical circuit adjustment procedure

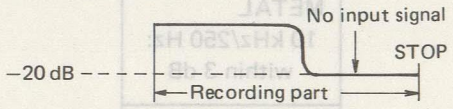
Perform the tape transport checks and head azimuth adjustment before following checks and adjustments.
Adjustment should be performed in the order of alignment tape.
In the steps marked with an asterisk (*), adjustment should be performed after replacing the heads.
Perform this adjustment with the NR switch set to OFF.
Ref. input level : —8 dBs (LINE IN; —20 dB ± 2 dB, MIC IN ; —68 dB ± 3 dB)

(0 dBs = 0.775 V)

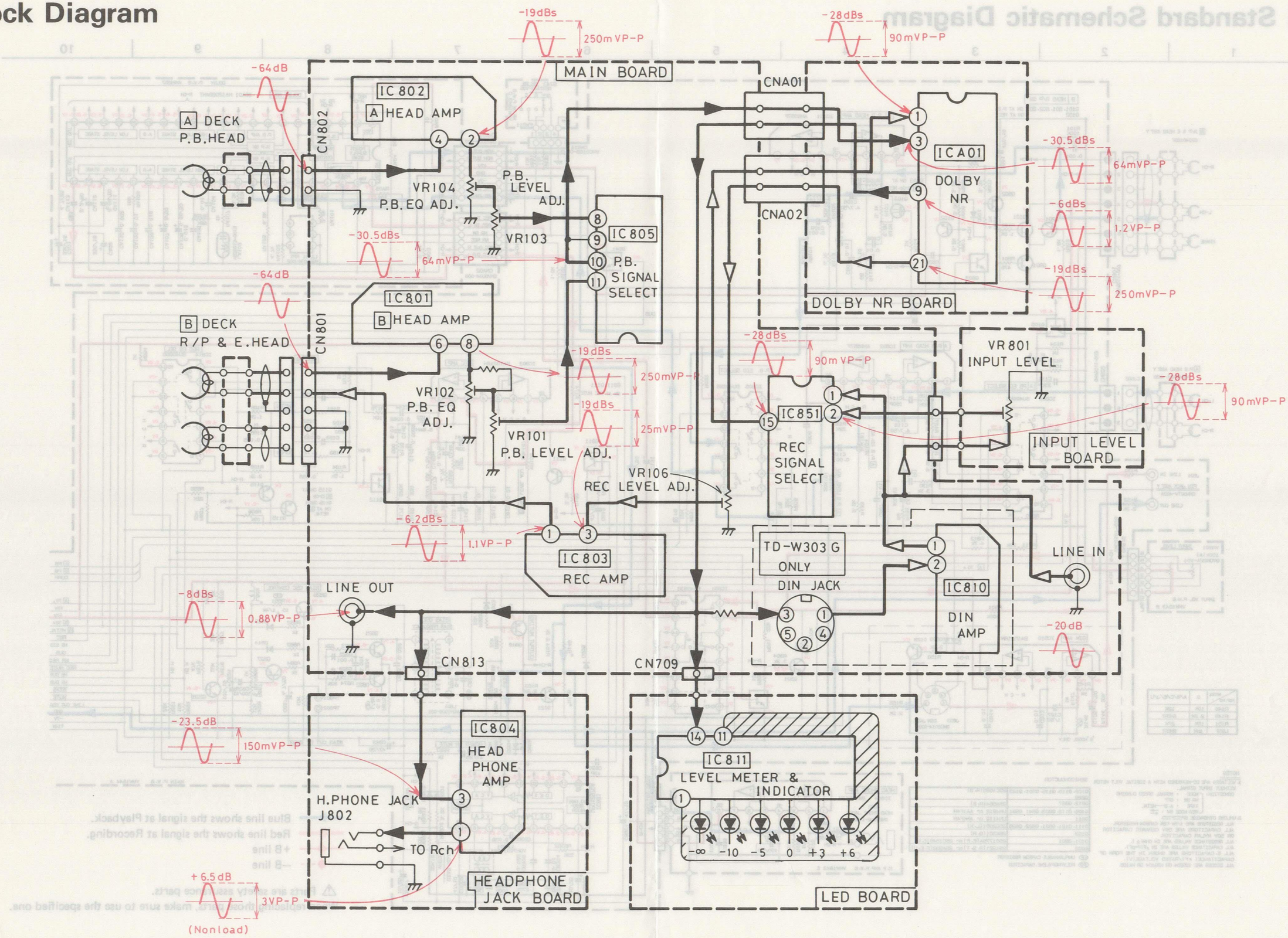
Step	Item	Check and Adjustment			
				Input signal (frequency, level)	Output raise value, deviation value
1	Checking DOLBY circuit (Rec mode) (BIAS, CUT)	Signal input: LINE IN Cal. level: 400 Hz, —8.2 dBs Output terminal: CNA02 ⑦ & ⑧ Pin 5 : R-ch Pin 6 : L-ch	DOLBY B (Rec)	1 kHz, Cal. —40 dB	+5.7 dB ± 2 dB
				5 kHz, Cal. —20 dB	+3.5 dB ± 1.5 dB
				1 kHz, Cal.	0 dB $^{+0.5}_{-1.0}$ dB
			DOLBY C (Rec)	1 kHz, Cal. —40 dB	+16.2 dB $^{+3}_{-2}$ dB
				5 kHz, Cal. —20 dB	+2.9 dB ± 2.5 dB
				1 kHz, Cal.	0 dB ± 1 dB

Step	Item	Adjustment	Adjusting point	Standard value	Remarks
*2	Playback gain adjustment	[Deck A] In FWD mode, adjust to −8 dBs $^{+1}_{0}$ dB. (Adjusting target: −8 dBs) Different level between L and R should be within 0.5 dB. • LINE OUT: −8 dBs $^{+1.5}_{-0.5}$ dB Different level between L and R should be within 1 dB.	Deck A L : VR103 R : VR203	LINE OUT: −8 dBs $^{+1.5}_{-0.5}$ dB	Test tape : VTT724 Measuring point: LINE OUT
		[Deck B] In FWD mode, adjust to −8 dBs $^{+1}_{0}$ dB. (Adjusting target: −8 dBs) Different level between L and R should be within 0.5 dB. • LINE OUT: −8 dBs $^{+1.5}_{-0.5}$ dB Different level between L and R should be within 1 dB. • DIN OUT: −8 dBs $^{+1.5}_{-0.5}$ dB Different level between L and R should be within 1 dB. • PHONES: −24 dB $^{+2.5}_{-1.5}$ dB Different level between L and R should be within 2 dB.	Deck B L : VR101 R : VR201	LINE OUT: −8 dBs $^{+1.5}_{-0.5}$ dB DIN OUT: −8 dBs $^{+1.5}_{-0.5}$ dB PHONES: −24 dB $^{+2.5}_{-1.5}$ dB	
*3	Playback frequency response adjustment and confirming	• Adjustment In FWD direction, play the test tape. Adjust the different output level 12.5 kHz/1 kHz to be following value. +1.0 dB ± 0.5 dB (Deck A) +0.5 dB ± 0.5 dB (Deck B)	Deck A L : VR104 R : VR204 Deck B L : VR102 R : VR202	12.5 kHz/1 kHz Deck A: 1 ± 0.5 dB Deck B: 0.5 ± 0.5 dB	Ref. frequency: 1 kHz Measuring point: LINE OUT NR switch: OFF Test tape: TMT735
		• Confirming Different level between maximum and minimum playback level of 8 kHz, 1 kHz and 12.5 kHz should be within 3 dB. [Deck A] 63 Hz/1 kHz : 2 dB ± 3 dB 12.5 kHz/1 kHz : 1 dB ± 2 dB [Deck B] 63 Hz/1 kHz : 2 dB ± 3 dB 12.5 kHz/1 kHz : 0.5 dB ± 2 dB			
*4	Recording bias frequency adjustment	Measure with lead clipping body of C825. Controller: L801	L801	95 kHz ± 1 Hz	Deck B Direction: FWD or REV Tape: METAL
*5	Dolby HX PRO adjustment	1) Make sure to perform this adjustment after the Bias frequency adjustment of the above step 4. 2) Adjust LB301 and LB401 to obtain minimum voltages at the both ends of RB303 and RB404.	L : LB301 R : LB401	Minimum voltage	Deck B In FWD or REV direction Tape: METAL REC/PLAY mode

Step	Item	Adjustment	Adjusting point	Standard value	Remarks
*6	Recording and playback frequency response adjustment	• Adjustment NR: OFF, Tape: NORMAL Adjust the output level of 12.5 kHz to be 0.5 dB ± 0.5 dB from the output level of 1.25 kHz, by VRB31 (L-ch) and VRB41 (R-ch) when recording. REC LED to be lighted. • Area specification NORMAL/CrO_2/METAL, NR : OFF  NR : B/C ON  	For Normal tape L : VRB31 R : VRB41	NR: OFF NORMAL tape 63 Hz/1 kHz: 0 dB ± 3 dB 12.5 kHz/1 kHz: 0 dB ± 3 dB CrO_2/METAL 63 Hz/1 kHz: 0 dB ± 3 dB 12.5 kHz/1 kHz: 0 dB ± 3 dB NORMAL/CrO_2/METAL 10 kHz/250 Hz: within 3 dB NR: B/C ON NORMAL tape 63 Hz/1 kHz: 0 dB ± 3 dB 12.5 kHz/1 kHz: 0 dB ± 4 dB CrO_2/METAL 63 Hz/1 kHz: 0 dB ± 3 dB 12.5 kHz/1 kHz: 0 dB ± 5 dB NORMAL/CrO_2/METAL 10 kHz/250 Hz: within 4 dB	NR: OFF Signal input: LINE IN Recording level: Ref. –20 dB
*7	Checking erase current	Connect a 1 Ω resistor to the erase head terminal, and confirm that the voltage at the both ends meets the specifications in the Rec. mode.		NORMAL tape: 60 mV ± 15% CrO_2 tape: 88 mV ± 15% METAL tape: 165 mV ± 15%	This adjustment must be performed after completion of the bias current adjustment.
*8	Recording and playback sensitivity adjustment Deck [B]	1) Apply a 1 kHz signal to the LINE IN terminal, record a 1 kHz signal at reference level (–8 dBs) input for both (L and R) channels on a normal tape. 2) Play back the recorded part, and adjust the recording level controls so that LINE OUT terminal level becomes –8 dBs. Then, adjust VR106 and VR206 so that LINE OUT terminal level becomes –8 dBs.	For Normal tape: L : VR106 R : VR206	NORMAL tape: –8 dBs $\pm^{1}_{0}$ dB Different level between L and R should be within 0.5 dB.	NR: OFF Tape: NORMAL Signal input: LINE IN Frequency : 1 kHz (Input signal level: Reference)

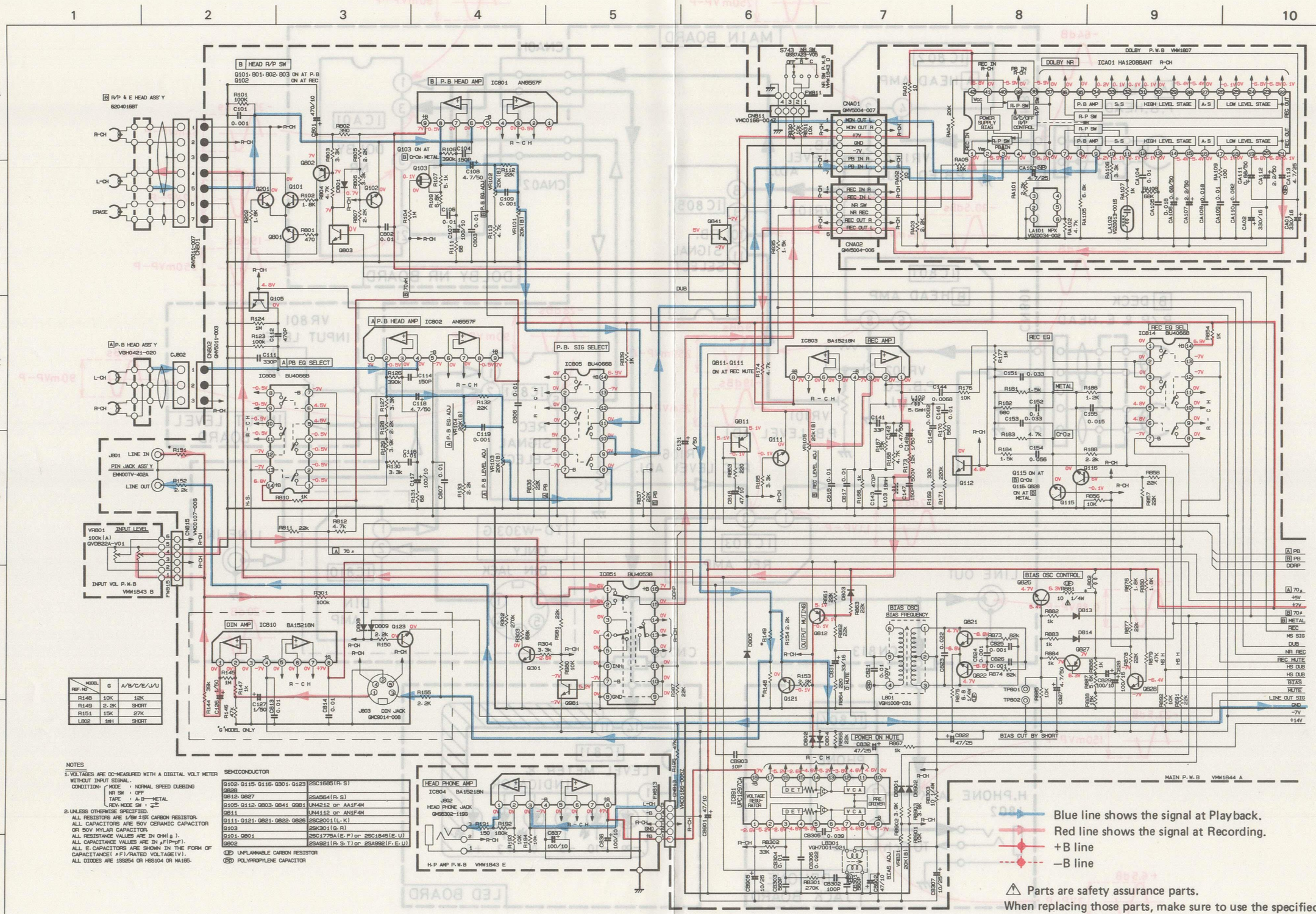
Step	Item	Adjustment	Adjusting point	Standard value	Remarks
*9	Checking record/ playback distortion Deck [B]	1) Record a 1 kHz, −20 dB (reference level) signal to LINE IN terminals. 2) Play back the recorded tape. Check the output with a distortion meter to see if the value conforms to the standard value.		Normal tape: Less than 2% CrO_2 tape: Less than 3% Metal tape: Less than 2% (THD)	NR: OFF Signal input: LINE IN Frequency: 1 kHz Signal level: Reference FWD mode
10	Recording and playback signal to noise ratio	Record 1 kHz, −20 dB (reference level) signal inputted through the LINE IN terminals, and, in mid course of the recording, stop inputting the signal and continue recording without any input signal.  		Normal, CrO_2 & Metal tapes: More than 42 dB	Apply an input level to LINE IN terminals with the recording level controls set to maximum so that the peak level indicator reads 0 dB.
11	Checking erasing ratio and remaining noise	Input signal level: Reference +20 dB Frequency: 400 Hz		NORMAL/CrO_2/ METAL: More than 55 dB	
12	DDRP operation confirming	Mode: STOP 1) DCS cord "B6" input Light the DDRP indicator (Green). 2) DCS cord "B7" input Put out the DDRP indicator (Green). Mode: REC/PAUSE Input volume: Maximum Input level: −10.8 dBs Frequency: 1 kHz Measure the signal level in LINE OUT. 1) DCS cord "B6" input NORMAL tape: −11 dBs ± 2 dB METAL tape: −8 dBs ± 2 dB Should not change the level with INPUT LEVEL controller movement. 2) DCS cord "B7" input NORMAL tape: +1.2 dBs ± 2 dB METAL tape: +1.2 dBs ± 2 dB			

8 Block Diagram



TD-W303A/B/C/E/G/J/U

9 Standard Schematic Diagram



MODEL / REF.NO	G	A/B/C/E/J/U
R148	10K	12K
R149	2.2K	SHORT
R151	15K	27K
L802	1mH	SHORT

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION: MODE : NORMAL SPEED DUBBING
   NR SW : OFF
   TAPE : A-B METAL
   REV-MODE SW :
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V).
   ALL DIODES ARE 1SS254 OR HSS104 OR MA165.

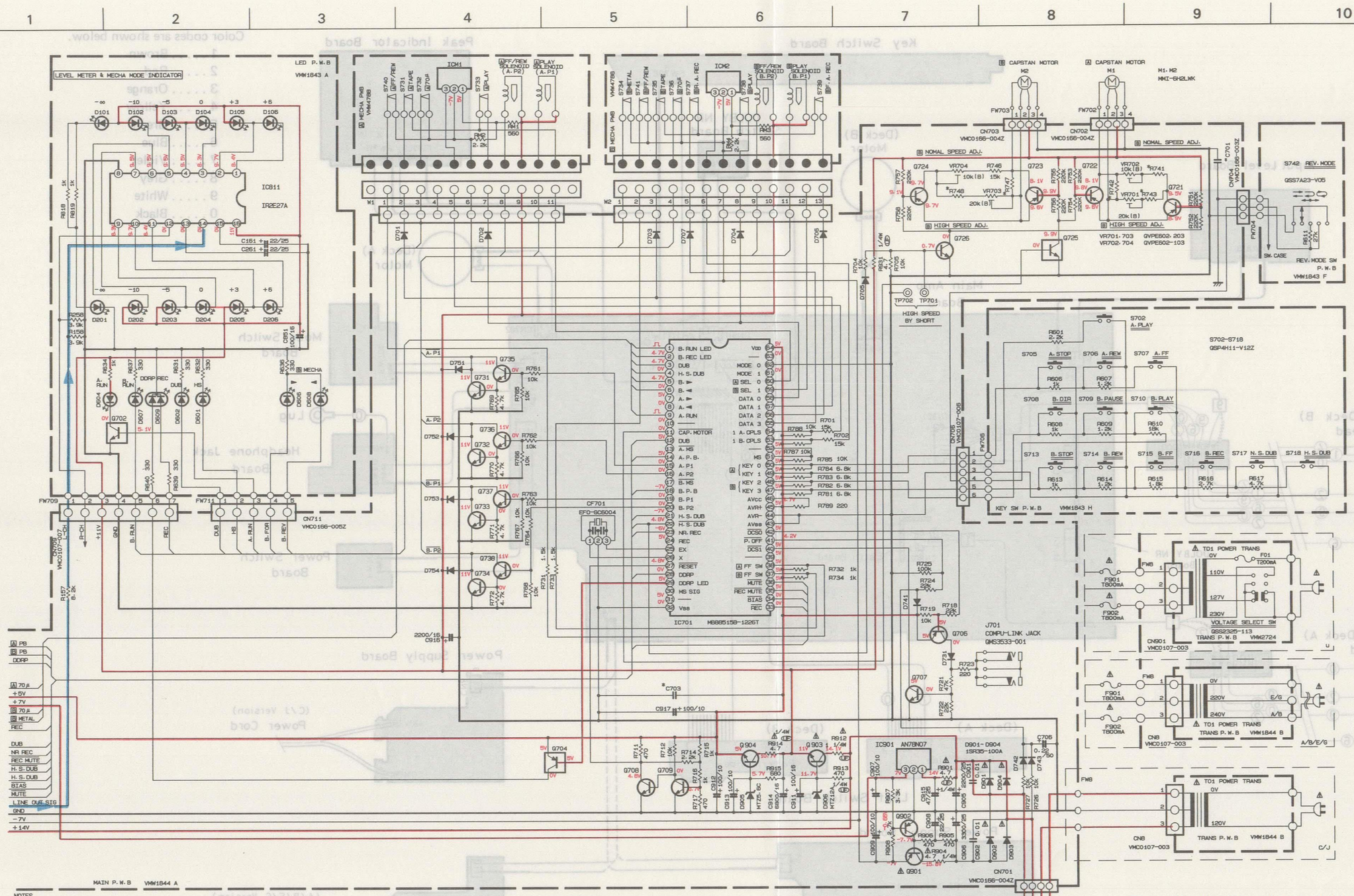
SEMICONDUCTOR

Q102·Q115·Q116·Q301·Q123	2SC1685(R·S)
Q838	
Q812·Q827	2SA564(R·S)
Q105·Q112·Q803·Q841 Q981	UN4212 or AA1F4M
Q811	UN4112 or AN1F4M
Q111·Q121·Q821·Q822·Q826	2SC2001(L·K)
Q103	2SK301(Q·R)
Q101·Q801	2SC1775A(E·F) or 2SC1845(E·U)
Q802	2SA921(R·S·T) or 2SA932(F·E·U)

(UF) UNFLAMMABLE CARBON RESISTOR
(PP) POLYPROPYLENE CAPACITOR

Blue line shows the signal at Playback.
Red line shows the signal at Recording.
+B line
−B line

⚠ Parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION: MODE : NORMAL SPEED DUBBING
   NR SW : OFF
   TAPE : A·B—METAL
   REV·MODE SW : ⇄
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF) /RATED VOLTAGE(V).
   ALL DIODES ARE 1SS254 OR HSS104 OR MA165.

(UR) UNFLAMMABLE CARBON RESISTOR
(NP) NON-POLARISED ELECTROLYTIC CAPACITOR
(PP) POLYPROPYLENE CAPACITOR

3. THE RESISTORS LISTED BELOW ARE FUSIBLE RESISTOR IN THE MODEL TD-W503K A/B/E/G/U R804·R814·R831

REF.NO. \ MODEL	G	A/B/C/E/J/U
C701	0.047μ	—
C703	0.047μ	—
R741	12K	15K
R742·R747	56K	68K
R743·R748	27K	22K

SEMICONDUCTORS

D104·105·204·205·601 D602·105·206	SLR-55VC70F124	Q707·708·709·726 Q736·737·738·735	2SC1685 (R·S)
D101·102·103·201·202 D203·606·608 D604·607	SLR-55DC70F124	Q706·721·722·723·724 Q902	2SA564 (R·S)
D901·902·903·904 D751·752·753·754	1SR35-100A	Q731·732·733·734·904	2SC2001 (L·K)
D609	SPR-55MVT5F	Q702·725	AA1F4M or UN4212
Q704	AN1F4M or UN4112	Q903	2SD882 (G·P)
		Q901	2SB772 (G·P)

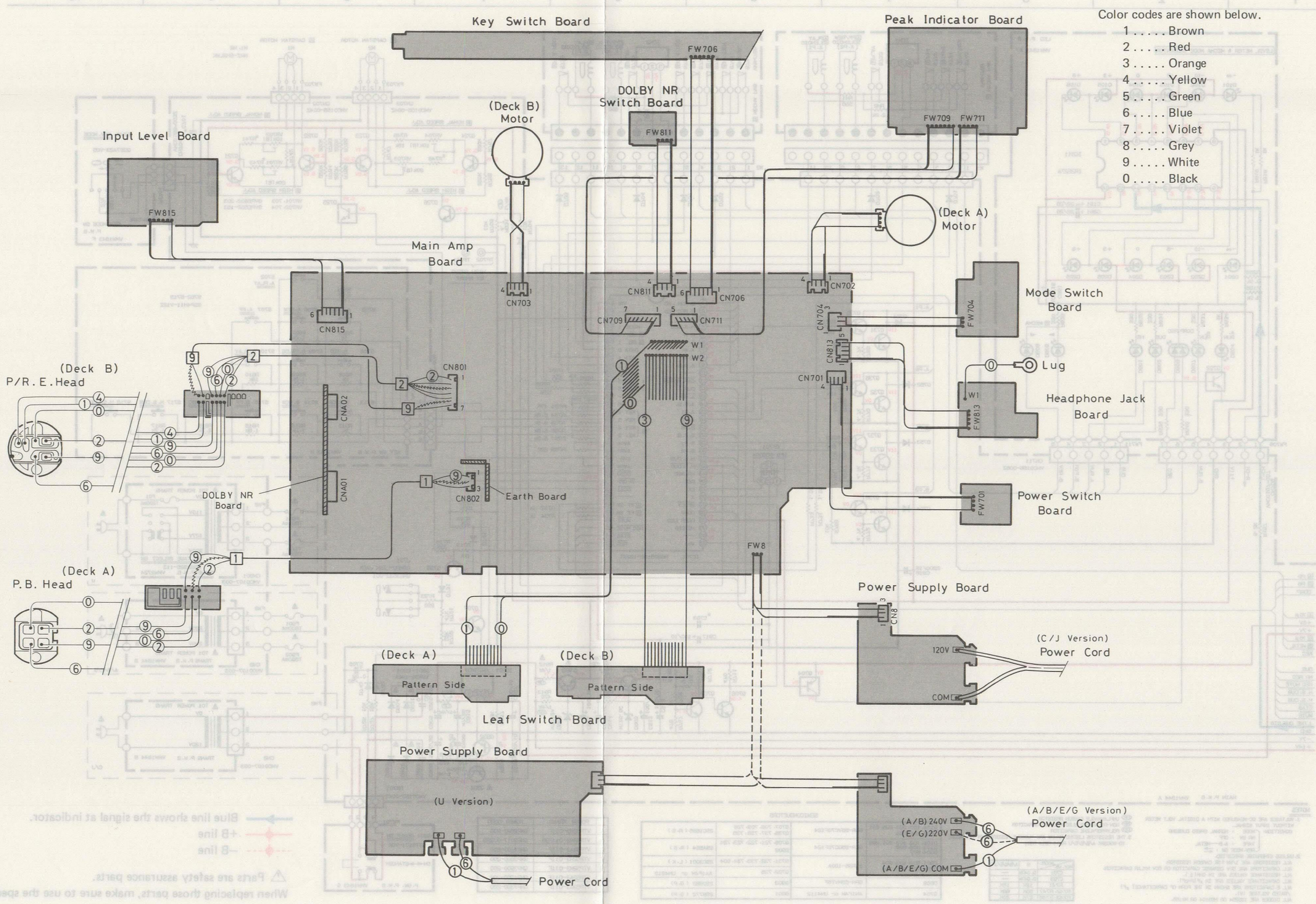
	POWER TRANS.	POWER CORD
A	VTP52M3-011F	QMP2560-200
B	VTP52M3-011FBS	QMP9017-00BBS
C	VTP52A3-011F	QMP1200-200
E	VTP52M3-011F	QMP3900-200
G	VTP52M3-011F	QMP3900-200
J	VTP52A3-011F	QMP1200-200
U	VTP52G3-011F	QMP7380-200

Blue line shows the signal at indicator.
+B line
—B line

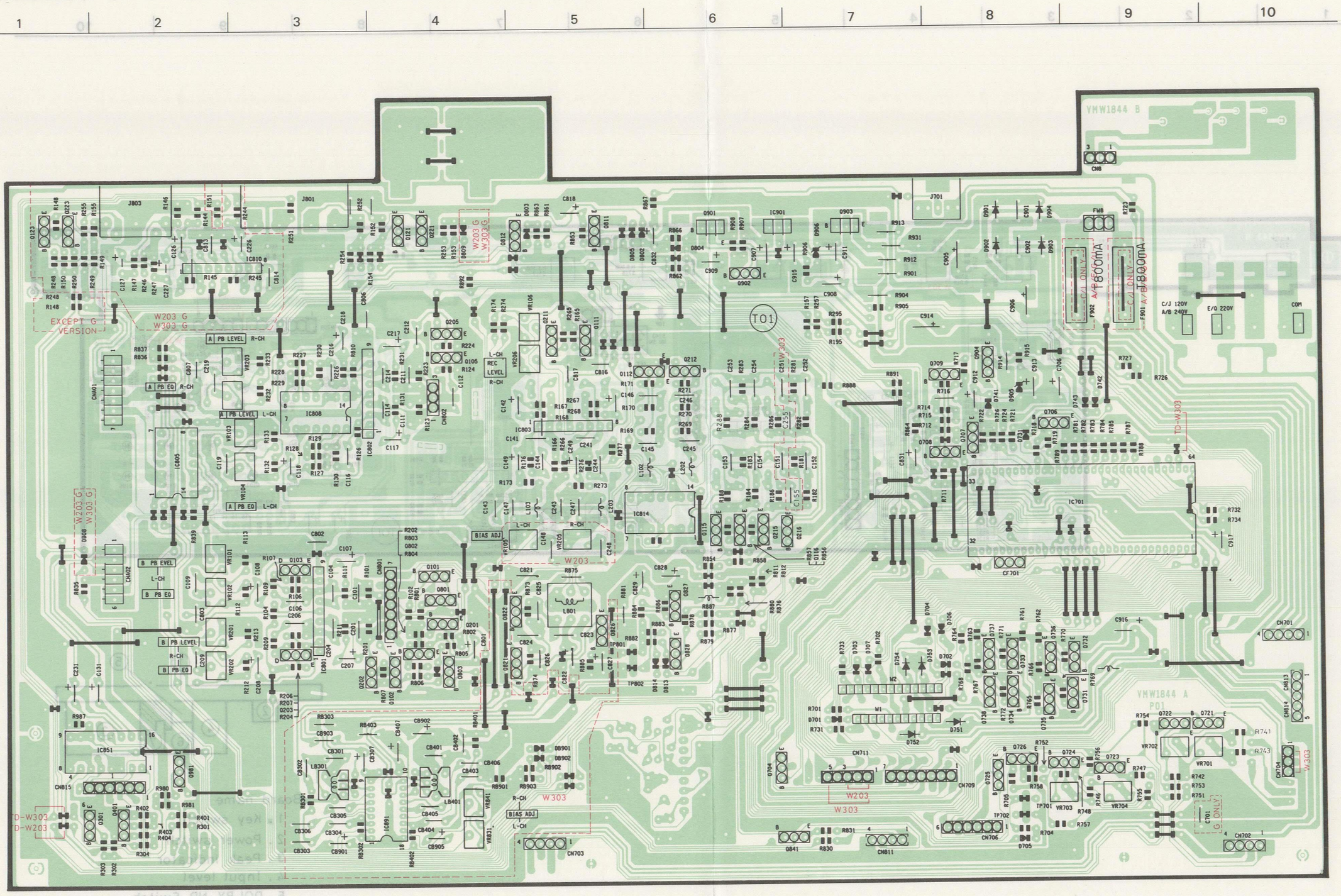
⚠ Parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

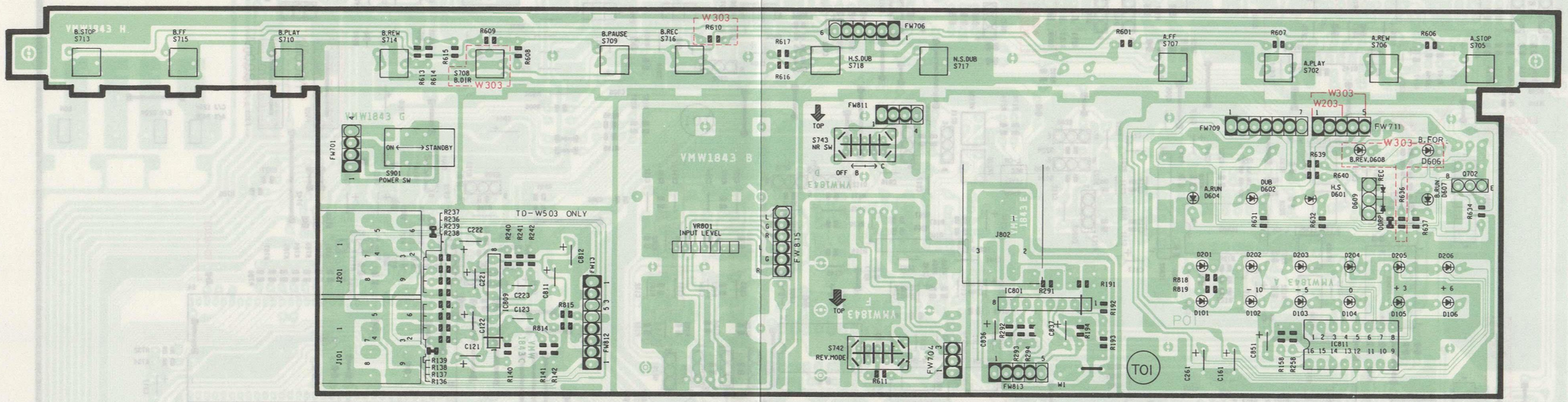
TD-W303A/B/C/E/G/J/U

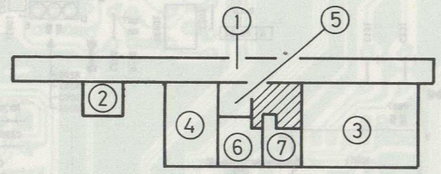
10 Wiring Connections



11 Location of P. C. Board Parts and Parts List







Board name

1. Key switch
2. Power switch
3. Peak indicator
4. Input level
5. DOLBY NR Switch
6. Mode switch
7. Headphone jack

Main Board Parts List (1)

⚠	REF.	PARTS NO.	PARTS NAME
	CB301	QFP32AJ-561ZM	PP CAPACITOR
	CB302	QCS11HJ-101	C.CAPACITOR
	CB303	QCS11HJ-561	C.CAPACITOR
	CB304	QCC11EM-103	C.CAPACITOR
	CB305	QFV71HJ-393ZM	TF.CAPACITOR
	CB306	QCC11EM-223	C.CAPACITOR
	CB307	QETC1EM-106ZM	E.CAPACITOR
	CB401	QFP32AJ-561ZM	PP CAPACITOR
	CB402	QCS11HJ-101	C.CAPACITOR
	CB403	QCS11HJ-561	C.CAPACITOR
	CB404	QCC11EM-103	C.CAPACITOR
	CB405	QFV71HJ-393ZM	TF.CAPACITOR
	CB406	QCC11EM-223	C.CAPACITOR
	CB407	QETC1EM-106ZM	E.CAPACITOR
	CB901	QETC1AM-476ZM	E.CAPACITOR
	CB902	QETC1AM-476ZM	E.CAPACITOR
	CB903	QCS11HJ-100	C.CAPACITOR
	CB905	QETC1EM-106ZM	E.CAPACITOR
	CF701	EFO-GC6004T5	CERA LOCK
	CN701	VMC0166-004Z	CONNECTOR
	CN702	VMC0166-004Z	CONNECTOR
	CN703	VMC0166-004Z	CONNECTOR
	CN704	VMC0166-003Z	CONNECTOR
	CN706	VMC0107-006	SOCKET
	CN709	VMC0107-007	SOCKET
	CN711	VMC0166-005Z	CONNECTOR
	CN8	VMC0107-003	CONNECTOR
	CN801	QMV5011-007	CONNECTOR
	CN802	QMV5011-003	CONNECTOR
	CN811	VMC0166-004Z	CONNECTOR
	CN813	VMC0166-005Z	CONNECTOR
	CN815	VMC0107-006	SOCKET
	C101	QCY41HK-102	C.CAPACITOR
	C104	QCS11HJ-151	C.CAPACITOR
	C106	QFV41HJ-103	TF.CAPACITOR
	C107	QETC1AM-107ZM	E.CAPACITOR
	C108	QETC1HM-475ZM	E.CAPACITOR
	C109	QCY41HK-102	C.CAPACITOR
	C111	QCS11HJ-331	C.CAPACITOR
	C112	QCS11HJ-471	C.CAPACITOR
	C114	QCS11HJ-151	C.CAPACITOR
	C116	QFV41HJ-103	TF.CAPACITOR
	C117	QETC1AM-107ZM	E.CAPACITOR
	C118	QETC1HM-475ZM	E.CAPACITOR
	C119	QCY41HK-102	C.CAPACITOR
	C126	QETC1HM-105ZM	E.CAPACITOR
	C127	QETC1HM-105ZM	E.CAPACITOR
	C131	QETC1HM-105ZM	E.CAPACITOR
	C141	QCS11HJ-330	C.CAPACITOR
	C142	QETC1HM-474ZM	E.CAPACITOR
	C143	QCS11HJ-471	C.CAPACITOR
	C144	QCY41HK-682	C.CAPACITOR
	C145	QCY41HK-822	C.CAPACITOR
	C146	QCC11EM-103	C.CAPACITOR
	C147	QCS32HJ-151ZV	C.CAPACITOR
	C149	QETC1HM-105ZM	E.CAPACITOR
	C151	QCC11EM-333	C.CAPACITOR
	C152	QCC11EM-104	C.CAPACITOR
	C153	QCC11EM-333	C.CAPACITOR
	C154	QCC31EM-563ZV	C.CAPACITOR
	C155	QCC11EM-153	C.CAPACITOR
	C201	QCY41HK-102	C.CAPACITOR
	C204	QCS11HJ-151	C.CAPACITOR
	C206	QFV41HJ-103	TF.CAPACITOR
	C207	QETC1AM-107ZM	E.CAPACITOR

⚠	REF.	PARTS NO.	PARTS NAME
	C208	QETC1HM-475ZM	E.CAPACITOR
	C209	QCY41HK-102	C.CAPACITOR
	C211	QCS11HJ-331	C.CAPACITOR
	C212	QCS11HJ-471	C.CAPACITOR
	C214	QCS11HJ-151	C.CAPACITOR
	C216	QFV41HJ-103	TF.CAPACITOR
	C217	QETC1AM-107ZM	E.CAPACITOR
	C218	QETC1HM-475ZM	E.CAPACITOR
	C219	QCY41HK-102	C.CAPACITOR
	C226	QETC1HM-105ZM	E.CAPACITOR
	C227	QETC1HM-105ZM	E.CAPACITOR
	C231	QETC1HM-105ZM	E.CAPACITOR
	C241	QCS11HJ-330	C.CAPACITOR
	C242	QETC1HM-474ZM	E.CAPACITOR
	C243	QCS11HJ-471	C.CAPACITOR
	C244	QCY41HK-682	C.CAPACITOR
	C245	QCY41HK-822	C.CAPACITOR
	C246	QCC11EM-103	C.CAPACITOR
	C247	QCS32HJ-151ZV	C.CAPACITOR
	C249	QETC1HM-105ZM	E.CAPACITOR
	C251	QCC11EM-333	C.CAPACITOR
	C252	QCC11EM-104	C.CAPACITOR
	C253	QCC11EM-333	C.CAPACITOR
	C254	QCC31EM-563ZV	C.CAPACITOR
	C255	QCC11EM-153	C.CAPACITOR
	C701	QCC11EM-473	C.CAPACITOR
	C703	QCC11EM-473	C.CAPACITOR
	C706	QETC1HM-224ZM	E.CAPACITOR
	C801	QETC1AM-477ZM	E.CAPACITOR
	C802	QCF11HP-103	C.CAPACITOR
	C803	QCF11HP-103	C.CAPACITOR
	C806	QCF11HP-103	C.CAPACITOR
	C807	QCF11HP-103	C.CAPACITOR
	C813	QCF11HP-103	C.CAPACITOR
	C814	QCF11HP-103	C.CAPACITOR
	C816	QCF11HP-103	C.CAPACITOR
	C817	QCF11HP-103	C.CAPACITOR
	C818	QETC1AM-476ZM	E.CAPACITOR
	C821	QFP32AJ-103ZM	PP CAPACITOR
	C822	QETC1EM-476ZM	E.CAPACITOR
	C823	QFV41HJ-223	TF.CAPACITOR
	C824	QCY41HK-102	C.CAPACITOR
	C825	QCY41HK-102	C.CAPACITOR
	C826	QCY41HK-102	C.CAPACITOR
	C827	QETC1HM-475ZM	E.CAPACITOR
	C828	QETC1CM-107ZM	E.CAPACITOR
	C829	QETC1AM-107ZM	E.CAPACITOR
	C831	QETC1CM-336ZM	E.CAPACITOR
	C832	QETC1EM-476ZM	E.CAPACITOR
	C901	QCF11HP-103	C.CAPACITOR
	C902	QCF11HP-103	C.CAPACITOR
	C905	QETB1EM-228N	E.CAPACITOR
	C906	QETB1EM-338N	E.CAPACITOR
	C907	QETC1AM-107ZM	E.CAPACITOR
	C908	QETC1EM-226ZM	E.CAPACITOR
	C909	QETC1AM-107ZM	E.CAPACITOR
	C911	QETC1CM-107ZM	E.CAPACITOR
	C912	QETC1AM-107ZM	E.CAPACITOR
	C913	QETC1AM-107ZM	E.CAPACITOR
	C914	QETB1CM-688N	E.CAPACITOR
	C915	QETC1EM-476ZM	E.CAPACITOR
	C916	QETB1CM-228N	E.CAPACITOR
	C917	QETC1AM-107ZM	E.CAPACITOR
	DB901	HSS104TJ	SI DIODE
	DB902	HSS104TJ	SI DIODE

⚠	REF.	PARTS NO.	PARTS NAME
	D701	HSS104TJ	SI DIODE
	D702	HSS104TJ	SI DIODE
	D703	HSS104TJ	SI DIODE
	D704	HSS104TJ	SI DIODE
	D705	HSS104TJ	SI DIODE
	D706	HSS104TJ	SI DIODE
	D707	HSS104TJ	SI DIODE
	D731	HSS104TJ	SI DIODE
	D741	HSS104TJ	SI DIODE
	D742	HSS104TJ	SI DIODE
	D743	HSS104TJ	SI DIODE
	D751	1SR35-100AT-93	SI DIODE
	D752	1SR35-100AT-93	SI DIODE
	D753	1SR35-100AT-93	SI DIODE
	D754	1SR35-100AT-93	SI DIODE
	D801	HSS104TJ	SI DIODE
	D802	HSS104TJ	SI DIODE
	D803	HSS104TJ	SI DIODE
	D804	HSS104TJ	SI DIODE
	D805	HSS104TJ	SI DIODE
	D808	HSS104TJ	SI DIODE
	D809	HSS104TJ	SI DIODE
	D813	HSS104TJ	SI DIODE
	D814	HSS104TJ	SI DIODE
⚠	D901	1SR35-100AT-93	SI DIODE
⚠	D902	1SR35-100AT-93	SI DIODE
⚠	D903	1SR35-100AT-93	SI DIODE
⚠	D904	1SR35-100AT-93	SI DIODE
	D905	MTZ5.6CT-77	Z.DIODE
	D906	MTZ12AT-77	Z.DIODE
	FW8	VWS103-08B34K	UL CP JUMPER
	ICB91	UPC1297CA	I C
	IC701	MB88515B-1226T	IC
	IC801	AN6557F	IC
	IC802	AN6557F	IC
	IC803	BA15218N	IC
	IC805	BU4066B	IC
	IC808	BU4066B	IC
	IC810	BA15218N	IC
	IC814	BU4066B	IC
	IC851	MC14053BCP	IC
	IC901	AN78N07	I.C
	J701	QMS3533-001	JACK
	J801	EMN00TV-402A	PIN JACK
	J803	QMC9014-008	DIN SOCKET
	LB301	VQH7001-021	OSC COIL(BIAS)
	LB401	VQH7001-021	OSC COIL(BIAS)
	L102	VQP0001-562S	INDUCTOR
	L103	VQP0001-183	INDUCTOR
	L202	VQP0001-562S	INDUCTOR
	L203	VQP0001-183	INDUCTOR
	L801	VQH1008-031	OSC COIL(BIAS)
	L802	VQP0001-102	INDUCTOR
	Q101	2SC1845(E,U)	TRANSISTOR
	Q102	2SC1685(R,S)	TRANSISTOR
	Q103	2SK301(Q,R)	FET
	Q105	AA1F4M	TR I M
	Q111	2SC2001(L,K)	TRANSISTOR
	Q112	AA1F4M	TR I M
	Q115	2SC1685(R,S)	TRANSISTOR
	Q116	2SC1685(R,S)	TRANSISTOR
	Q121	2SC2001(L,K)	TRANSISTOR
	Q123	2SC1685(R,S)	TRANSISTOR
	Q201	2SC1845(E,U)	TRANSISTOR
	Q202	2SC1685(R,S)	TRANSISTOR

⚠	REF.	PARTS NO.	PARTS NAME
	Q203	2SK301(Q,R)	FET
	Q205	AA1F4M	TR I M
	Q211	2SC2001(L,K)	TRANSISTOR
	Q212	AA1F4M	TR I M
	Q215	2SC1685(R,S)	TRANSISTOR
	Q216	2SC1685(R,S)	TRANSISTOR
	Q221	2SC2001(L,K)	TRANSISTOR
	Q223	2SC1685(R,S)	TRANSISTOR
	Q301	2SC1685(R,S)	TRANSISTOR
	Q401	2SC1685(R,S)	TRANSISTOR
	Q704	AN1F4M	TR I.M
	Q706	2SA564(R,S)	TRANSISTOR
	Q707	2SC1685(R,S)	TRANSISTOR
	Q708	2SC1685(R,S)	TRANSISTOR
	Q709	2SC1685(R,S)	TRANSISTOR
	Q721	2SA564(R,S)	TRANSISTOR
	Q722	2SA564(R,S)	TRANSISTOR
	Q723	2SA564(R,S)	TRANSISTOR
	Q724	2SA564(R,S)	TRANSISTOR
	Q725	AA1F4M	TR I M
	Q726	2SC1685(R,S)	TRANSISTOR
	Q731	2SC2001(L,K)	TRANSISTOR
	Q732	2SC2001(L,K)	TRANSISTOR
	Q733	2SC2001(L,K)	TRANSISTOR
	Q734	2SC2001(L,K)	TRANSISTOR
	Q735	2SC1685(R,S)	TRANSISTOR
	Q736	2SC1685(R,S)	TRANSISTOR
	Q737	2SC1685(R,S)	TRANSISTOR
	Q738	2SC1685(R,S)	TRANSISTOR
	Q801	2SC1845(E,U)	TRANSISTOR
	Q802	2SA992(F,E,U)	TRANSISTOR
	Q803	AA1F4M	TR I M
	Q811	AN1F4M	TR I.M
	Q812	2SA564(R,S)	TRANSISTOR
	Q821	2SC2001(L,K)	TRANSISTOR
	Q822	2SC2001(L,K)	TRANSISTOR
	Q826	2SC2001(L,K)	TRANSISTOR
	Q827	2SA564(R,S)	TRANSISTOR
	Q828	2SC1685(R,S)	TRANSISTOR
	Q841	AA1F4M	TR I M
⚠	Q901	2SB772(Q,P)	TRANSISTOR
⚠	Q902	2SA564(R,S)	TRANSISTOR
⚠	Q903	2SD882(Q,P)	TRANSISTOR
	Q904	2SC2001(L,K)	TRANSISTOR
	Q981	AA1F4M	TR I M
	RB301	QRD161J-274	CARBON RESISTOR
	RB302	QRD161J-333	CARBON RESISTOR
⚠	RB303	QRD14CJ-100S	UNF.C.RES.I.M
	RB401	QRD161J-274	CARBON RESISTOR
	RB402	QRD161J-333	CARBON RESISTOR
⚠	RB403	QRD14CJ-100S	UNF.C.RES.I.M
	RB901	QRD161J-103	CARBON RESISTOR
	RB902	QRD161J-392	CARBON RESISTOR
	RB903	QRD161J-392	CARBON RESISTOR
	R101	QRD161J-104	CARBON RESISTOR
	R102	QRD161J-182	CARBON RESISTOR
	R104	QRD161J-105	CARBON RESISTOR
	R106	QRD161J-394	CARBON RESISTOR
	R107	QRD161J-512	CARBON RESISTOR
	R109	QRD161J-682	CARBON RESISTOR
	R111	QRD161J-680	CARBON RESISTOR
	R112	QRD161J-223	CARBON RESISTOR
	R113	QRD161J-472	CARBON RESISTOR
	R123	QRD161J-104	CARBON RESISTOR
	R124	QRD161J-105	CARBON RESISTOR

TD-W303A/B/C/E/G/J/U

⚠	REF.	PARTS NO.	PARTS NAME
	R126	QRD161J-394	CARBON RESISTOR
	R127	QRD161J-332	CARBON RESISTOR
	R128	QRD161J-222	CARBON RESISTOR
	R129	QRD161J-392	CARBON RESISTOR
	R130	QRD161J-332	CARBON RESISTOR
	R131	QRD161J-680	CARBON RESISTOR
	R132	QRD161J-223	CARBON RESISTOR
	R133	QRD161J-222	CARBON RESISTOR
	R144	QRD161J-393	CARBON RESISTOR
	R145	QRD161J-105	CARBON RESISTOR
	R146	QRD161J-473	CARBON RESISTOR
	R147	QRD161J-102	CARBON RESISTOR
	R148	QRD161J-123	CARBON RESISTOR
	R149	QRD161J-222	CARBON RESISTOR
	R150	QRD161J-222	CARBON RESISTOR
	R151	QRD161J-273	CARBON RESISTOR
	R152	QRD161J-222	CARBON RESISTOR
	R153	QRD161J-222	CARBON RESISTOR
	R154	QRD161J-222	CARBON RESISTOR
	R155	QRD161J-222	CARBON RESISTOR
	R157	QRD161J-822	CARBON RESISTOR
	R165	QRD161J-332	CARBON RESISTOR
	R166	QRD161J-102	CARBON RESISTOR
	R167	QRD161J-153	CARBON RESISTOR
	R168	QRD161J-472	CARBON RESISTOR
	R169	QRD161J-331	CARBON RESISTOE
	R170	QRD161J-561	CARBON RESISTOR
	R171	QRD161J-224	CARBON RESISTOR
	R173	QRD161J-123	CARBON RESISTOR
	R174	QRD161J-472	CARBON RESISTOR
	R176	QRD161J-103	CARBON RESISTOR
	R177	QRD161J-105	CARBON RESISTOR
	R181	QRD161J-152	CARBON RESISTOR
	R182	QRD161J-681	CARBON RESISTOR
	R183	QRD161J-472	CARBON RESISTOR
	R184	QRD161J-152	CARBON RESISTOR
	R186	QRD161J-122	CARBON RESISTOR
	R188	QRD161J-222	CARBON RESISTOR
	R195	QRD161J-473	CARBON RESISTOR
	R201	QRD161J-104	CARBON RESISTOR
	R202	QRD161J-182	CARBON RESISTOR
	R204	QRD161J-105	CARBON RESISTOR
	R206	QRD161J-394	CARBON RESISTOR
	R207	QRD161J-512	CARBON RESISTOR
	R209	QRD161J-682	CARBON RESISTOR
	R211	QRD161J-680	CARBON RESISTOR
	R212	QRD161J-223	CARBON RESISTOR
	R213	QRD161J-472	CARBON RESISTOR
	R223	QRD161J-104	CARBON RESISTOR
	R224	QRD161J-105	CARBON RESISTOR
	R226	QRD161J-394	CARBON RESISTOR
	R227	QRD161J-332	CARBON RESISTOR
	R228	QRD161J-222	CARBON RESISTOR
	R229	QRD161J-392	CARBON RESISTOR
	R230	QRD161J-332	CARBON RESISTOR
	R231	QRD161J-680	CARBON RESISTOR
	R232	QRD161J-223	CARBON RESISTOR
	R233	QRD161J-222	CARBON RESISTOR
	R244	QRD161J-393	CARBON RESISTOR
	R245	QRD161J-105	CARBON RESISTOR
	R246	QRD161J-473	CARBON RESISTOR
	R247	QRD161J-102	CARBON RESISTOR
	R248	QRD161J-123	CARBON RESISTOR
	R249	QRD161J-222	CARBON RESISTOR
	R250	QRD161J-222	CARBON RESISTOR

⚠	REF.	PARTS NO.	PARTS NAME
	R251	QRD161J-273	CARBON RESISTOR
	R252	QRD161J-222	CARBON RESISTOR
	R253	QRD161J-222	CARBON RESISTOR
	R254	QRD161J-222	CARBON RESISTOR
	R255	QRD161J-222	CARBON RESISTOR
	R257	QRD161J-822	CARBON RESISTOR
	R265	QRD161J-332	CARBON RESISTOR
	R266	QRD161J-102	CARBON RESISTOR
	R267	QRD161J-153	CARBON RESISTOR
	R268	QRD161J-472	CARBON RESISTOR
	R269	QRD161J-331	CARBON RESISTOE
	R270	QRD161J-561	CARBON RESISTOR
	R271	QRD161J-224	CARBON RESISTOR
	R273	QRD161J-123	CARBON RESISTOR
	R274	QRD161J-472	CARBON RESISTOR
	R276	QRD161J-103	CARBON RESISTOR
	R277	QRD161J-105	CARBON RESISTOR
	R281	QRD161J-152	CARBON RESISTOR
	R282	QRD161J-681	CARBON RESISTOR
	R283	QRD161J-472	CARBON RESISTOR
	R284	QRD161J-152	CARBON RESISTOR
	R286	QRD161J-122	CARBON RESISTOR
	R288	QRD161J-222	CARBON RESISTOR
	R295	QRD161J-473	CARBON RESISTOR
	R301	QRD161J-104	CARBON RESISTOR
	R302	QRD161J-274	CARBON RESISTOR
	R303	QRD161J-683	CARBON RESISTOR
	R304	QRD161J-332	CARBON RESISTOR
	R401	QRD161J-104	CARBON RESISTOR
	R402	QRD161J-274	CARBON RESISTOR
	R403	QRD161J-683	CARBON RESISTOR
	R404	QRD161J-332	CARBON RESISTOR
	R701	QRD161J-153	CARBON RESISTOR
	R702	QRD161J-153	CARBON RESISTOR
	R704	QRD161J-103	CARBON RESISTOR
	R705	QRD161J-103	CARBON RESISTOR
	R711	QRD161J-471	CARBON RESISTOR
	R712	QRD161J-103	CARBON RESISTOR
	R714	QRD161J-222	CARBON RESISTOR
	R715	QRD161J-102	CARBON RESISTOR
	R716	QRD161J-102	CARBON RESISTOR
	R717	QRD161J-471	CARBON RESISTOR
	R718	QRD161J-223	CARBON RESISTOR
	R719	QRD161J-103	CARBON RESISTOR
	R721	QRD161J-473	CARBON RESISTOR
	R722	QRD161J-223	CARBON RESISTOR
	R723	QRD161J-221	CARBON RESISTOR
	R724	QRD161J-223	CARBON RESISTOR
	R725	QRD161J-104	CARBON RESISTOR
	R726	QRD161J-103	CARBON RESISTOR
	R727	QRD161J-103	CARBON RESISTOR
	R731	QRD161J-152	CARBON RESISTOR
	R732	QRD161J-102	CARBON RESISTOR
	R733	QRD161J-152	CARBON RESISTOR
	R734	QRD161J-102	CARBON RESISTOR
	R741	QRD161J-153	CARBON RESISTOR
	R742	QRD161J-683	CARBON RESISTOR
	R743	QRD161J-223	CARBON RESISTOR
	R746	QRD161J-153	CARBON RESISTOR
	R747	QRD161J-683	CARBON RESISTOR
	R748	QRD161J-223	CARBON RESISTOR
	R751	QRD161J-224	CARBON RESISTOR
	R752	QRD161J-224	CARBON RESISTOR
	R753	QRD161J-224	CARBON RESISTOR
	R754	QRD161J-224	CARBON RESISTOR

⚠	REF.	PARTS NO.	PARTS NAME
	R755	QRD161J-224	CARBON RESISTOR
	R756	QRD161J-224	CARBON RESISTOR
	R757	QRD161J-224	CARBON RESISTOR
	R758	QRD161J-224	CARBON RESISTOR
	R761	QRD161J-103	CARBON RESISTOR
	R762	QRD161J-103	CARBON RESISTOR
	R763	QRD161J-103	CARBON RESISTOR
	R764	QRD161J-103	CARBON RESISTOR
	R765	QRD161J-103	CARBON RESISTOR
	R766	QRD161J-103	CARBON RESISTOR
	R767	QRD161J-103	CARBON RESISTOR
	R768	QRD161J-103	CARBON RESISTOR
	R769	QRD161J-472	CARBON RESISTOR
	R770	QRD161J-472	CARBON RESISTOR
	R771	QRD161J-472	CARBON RESISTOR
	R772	QRD161J-472	CARBON RESISTOR
	R781	QRD161J-682	CARBON RESISTOR
	R782	QRD161J-682	CARBON RESISTOR
	R783	QRD161J-682	CARBON RESISTOR
	R784	QRD161J-682	CARBON RESISTOR
	R785	QRD161J-103	CARBON RESISTOR
	R787	QRD161J-103	CARBON RESISTOR
	R788	QRD161J-103	CARBON RESISTOR
	R789	QRD161J-221	CARBON RESISTOR
	R801	QRD161J-471	CARBON RESISTOR
	R802	QRD161J-391	CARBON RESISTOR
	R803	QRD161J-332	CARBON RESISTOR
	R804	QRD161J-472	CARBON RESISTOR
	R805	QRD161J-222	CARBON RESISTOR
	R806	QRD161J-332	CARBON RESISTOR
	R807	QRD161J-222	CARBON RESISTOR
	R810	QRD161J-102	CARBON RESISTOR
	R811	QRD161J-223	CARBON RESISTOR
	R812	QRD161J-472	CARBON RESISTOR
	R830	QRD161J-103	CARBON RESISTOR
	R831	QRD161J-103	CARBON RESISTOR
	R835	QRD161J-152	CARBON RESISTOR
	R836	QRD161J-223	CARBON RESISTOR
	R837	QRD161J-223	CARBON RESISTOR
	R839	QRD161J-102	CARBON RESISTOR
	R853	QRD161J-221	CARBON RESISTOR
	R854	QRD161J-102	CARBON RESISTOR
	R856	QRD161J-103	CARBON RESISTOR
	R857	QRD161J-223	CARBON RESISTOR
	R858	QRD161J-223	CARBON RESISTOR
	R861	QRD161J-223	CARBON RESISTOR
	R862	QRD161J-223	CARBON RESISTOR
	R863	QRD161J-223	CARBON RESISTOR
	R864	QRD161J-221	CARBON RESISTOR
	R866	QRD161J-223	CARBON RESISTOR
	R867	QRD161J-102	CARBON RESISTOR
	R873	QRD161J-823	CARBON RESISTOR
	R874	QRD161J-823	CARBON RESISTOR
⚠	R875	QRD14CJ-6R8S	UNF.C.RES.I.M
	R876	QRD161J-182	CARBON RESISTOR
	R877	QRD161J-223	CARBON RESISTOR
	R878	QRD161J-223	CARBON RESISTOR
	R879	QRD161J-473	CARBON RESISTOR
	R880	QRD161J-182	CARBON RESISTOR
⚠	R881	QRZ0077-100	F.RES.I.M
	R882	QRD161J-102	CARBON RESISTOR
	R883	QRD161J-102	CARBON RESISTOR
	R884	QRD161J-102	CARBON RESISTOR
	R885	QRD161J-103	CARBON RESISTOR
	R886	QRD161J-102	CARBON RESISTOR

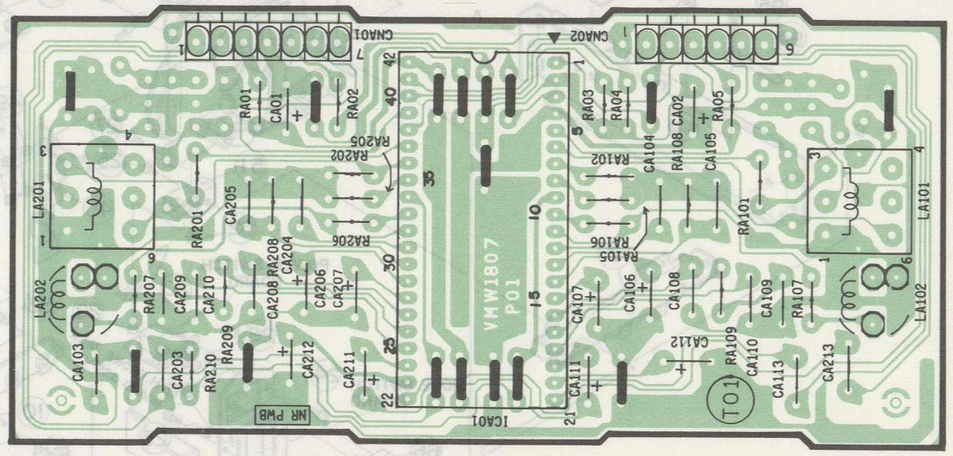
⚠	REF.	PARTS NO.	PARTS NAME
	R887	QRD161J-562	CARBON RESISTOR
	R888	QRD161J-153	CARBON RESISTOR
	R891	QRD161J-223	CARBON RESISTOR
	R892	QRD161J-103	CARBON RESISTOR
⚠	R901	QRD14CJ-4R7SX	C RESISTOR
⚠	R904	QRZ0077-4R7X	F.RES.I.M
⚠	R905	QRD161J-471	CARBON RESISTOR
	R906	QRD161J-471	CARBON RESISTOR
	R907	QRD161J-332	CARBON RESISTOR
	R908	QRD161J-272	CARBON RESISTOR
⚠	R912	QRD14CJ-1R0SX	UNF.C.RES.I.M
⚠	R913	QRD14CJ-471SX	C RESISTOR
⚠	R914	QRZ0077-4R7X	F.RES.I.M
	R915	QRD161J-681	CARBON RESISTOR
	R931	QRH144J-4R7	FUSI RESISTOR
	R980	QRD161J-103	CARBON RESISTOR
	R981	QRD161J-223	CARBON RESISTOR
	R987	QRD161J-223	CARBON RESISTOR
	VRB31	QVZ3523-203AZ	V RESISTOR
	VRB41	QVZ3523-203AZ	V RESISTOR
	VR101	QVZ3523-203AZ	V RESISTOR
	VR102	QVZ3523-203AZ	V RESISTOR
	VR103	QVZ3523-203AZ	V RESISTOR
	VR104	QVZ3523-203AZ	V RESISTOR
	VR106	QVZ3523-203AZ	V RESISTOR
	VR201	QVZ3523-203AZ	V RESISTOR
	VR202	QVZ3523-203AZ	V RESISTOR
	VR203	QVZ3523-203AZ	V RESISTOR
	VR204	QVZ3523-203AZ	V RESISTOR
	VR206	QVZ3523-203AZ	V RESISTOR
	VR701	QVPE612-203ZM	V.RESISTOR
	VR702	QVPE612-103ZM	V RESISTOR IM
	VR703	QVPE612-203ZM	V.RESISTOR
	VR704	QVPE612-103ZM	V RESISTOR IM

■ Main Board Parts List (2)

⚠	REF.	PARTS NO.	PARTS NAME
	C161	QETC1EM-226ZM	E.CAPACITOR
	C261	QETC1EM-226ZM	E.CAPACITOR
	C836	QETC1AM-107ZM	E.CAPACITOR
	C837	QETC1AM-107ZM	E.CAPACITOR
	C851	QETC1CM-107ZM	E.CAPACITOR
	D101	SLR-55DC70F124	LED I/M (M,N,P)
	D102	SLR-55DC70F124	LED I/M (M,N,P)
	D103	SLR-55DC70F124	LED I/M (M,N,P)
	D104	SLR-55VC70F124	LED I/M (M,N,P)
	D105	SLR-55VC70F124	LED I/M (M,N,P)
	D106	SLR-55VC70F124	LED I/M (M,N,P)
	D201	SLR-55DC70F124	LED I/M (M,N,P)
	D202	SLR-55DC70F124	LED I/M (M,N,P)
	D203	SLR-55DC70F124	LED I/M (M,N,P)
	D204	SLR-55VC70F124	LED I/M (M,N,P)
	D205	SLR-55VC70F124	LED I/M (M,N,P)
	D206	SLR-55VC70F124	LED I/M (M,N,P)
	D601	SLR-55VC70F124	LED I/M (M,N,P)
	D602	SLR-55VC70F124	LED I/M (M,N,P)
	D604	SLR-55DC70F124	LED I/M (M,N,P)
	D606	SLR-55DC70F124	LED I/M (M,N,P)
	D607	SLR-55DC70F124	LED I/M (M,N,P)
	D608	SLR-55DC70F124	LED I/M (M,N,P)
	D609	SPR-55MVT5F	LED
	IC804	BA15218N	IC

⚠	REF.	PARTS NO.	PARTS NAME
	IC811	IR2E27A	IC
	J802	QMS6302-119G	JACK
	Q702	AA1F4M	TR I M
	R158	QRD161J-392	CARBON RESISTOR
	R191	QRD161J-151	CARBON RESISTOR
	R192	QRD161J-184	CARBON RESISTOR
	R193	QRD161J-103	CARBON RESISTOR
	R194	QRD161J-103	CARBON RESISTOR
	R258	QRD161J-392	CARBON RESISTOR
	R291	QRD161J-151	CARBON RESISTOR
	R292	QRD161J-184	CARBON RESISTOR
	R293	QRD161J-103	CARBON RESISTOR
	R294	QRD161J-103	CARBON RESISTOR
	R601	QRD161J-222	CARBON RESISTOR
	R606	QRD161J-102	CARBON RESISTOR
	R607	QRD161J-122	CARBON RESISTOR
	R608	QRD161J-102	CARBON RESISTOR
	R609	QRD161J-122	CARBON RESISTOR
	R610	QRD161J-183	CARBON RESISTOR
	R611	QRD161J-273	CARBON RESISTOR
	R613	QRD161J-102	CARBON RESISTOR
	R614	QRD161J-122	CARBON RESISTOR
	R615	QRD161J-182	CARBON RESISTOR
	R616	QRD161J-272	CARBON RESISTOR
	R617	QRD161J-472	CARBON RESISTOR
	R631	QRD161J-331	CARBON RESISTOE
	R632	QRD161J-331	CARBON RESISTOE
	R634	QRD161J-102	CARBON RESISTOR
	R636	QRD161J-331	CARBON RESISTOE
	R637	QRD161J-331	CARBON RESISTOE
	R639	QRD161J-331	CARBON RESISTOE
	R640	QRD161J-331	CARBON RESISTOE
	R818	QRD161J-102	CARBON RESISTOR
	R819	QRD161J-102	CARBON RESISTOR
	S702	QSP4H11-V12Z	TACT SW
	S705	QSP4H11-V12Z	TACT SW
	S706	QSP4H11-V12Z	TACT SW
	S707	QSP4H11-V12Z	TACT SW
	S708	QSP4H11-V12Z	TACT SW
	S709	QSP4H11-V12Z	TACT SW
	S710	QSP4H11-V12Z	TACT SW
	S713	QSP4H11-V12Z	TACT SW
	S714	QSP4H11-V12Z	TACT SW
	S715	QSP4H11-V12Z	TACT SW
	S716	QSP4H11-V12Z	TACT SW
	S717	QSP4H11-V12Z	TACT SW
	S718	QSP4H11-V12Z	TACT SW
	S722	QSS7A23-V05	SLIDE SWITCH
	S723	QSS7A23-V05	SLIDE SWITCH
	S742	QSS7A23-V05	SLIDE SWITCH
	S743	QSS7A23-V05	SLIDE SWITCH
	S901	QST8101-V04	PUSH SW
	VR801	QVDB22A-V01	V RESISTOR
⚠	CN901	VMC0107-003	CONNECTOR

■ DOLBY NR Board

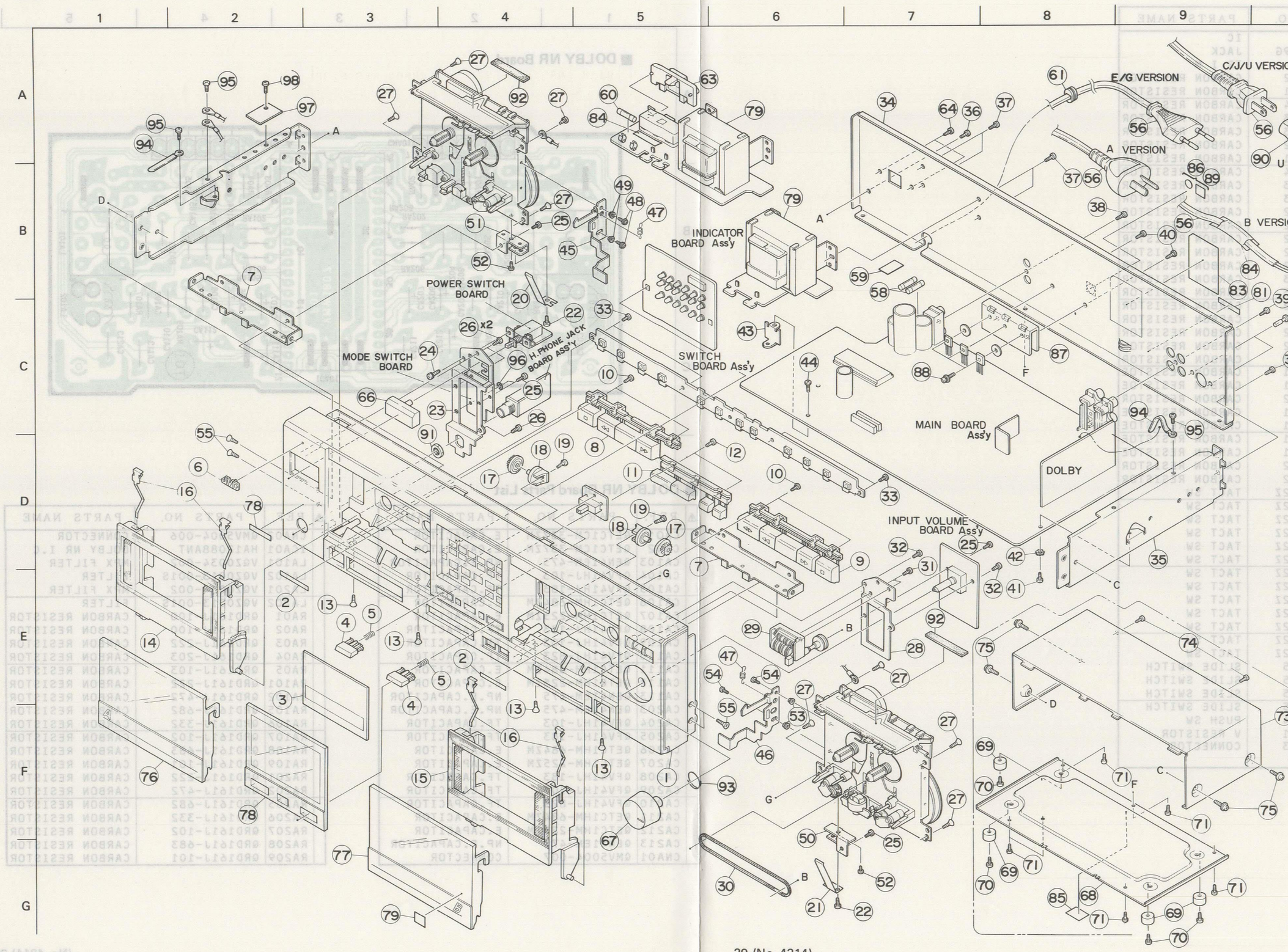


■ DOLBY NR Board Parts List

⚠	REF.	PARTS NO.	PARTS NAME
	CA01	QETC1CM-337ZM	E.CAPACITOR
	CA02	QETC1CM-337ZM	E.CAPACITOR
	CA103	QEN41EM-475	NP.E.CAPACITOR
	CA104	QFV41HJ-103	TF.CAPACITOR
	CA105	QFV41HJ-183	TF.CAPACITOR
	CA106	QETC1HM-684ZM	E.CAPACITOR
	CA107	QETC1HM-225ZM	E.CAPACITOR
	CA108	QFV41HJ-183	TF.CAPACITOR
	CA109	QFV41HJ-103	TF.CAPACITOR
	CA110	QFV41HJ-823	TF.CAPACITOR
	CA111	QETC1HM-684ZM	E.CAPACITOR
	CA112	QETC1HM-225ZM	E.CAPACITOR
	CA113	QEN41EM-475	NP.E.CAPACITOR
	CA203	QEN41EM-475	NP.E.CAPACITOR
	CA204	QFV41HJ-103	TF.CAPACITOR
	CA205	QFV41HJ-183	TF.CAPACITOR
	CA206	QETC1HM-684ZM	E.CAPACITOR
	CA207	QETC1HM-225ZM	E.CAPACITOR
	CA208	QFV41HJ-183	TF.CAPACITOR
	CA209	QFV41HJ-103	TF.CAPACITOR
	CA210	QFV41HJ-823	TF.CAPACITOR
	CA211	QETC1HM-684ZM	E.CAPACITOR
	CA212	QETC1HM-225ZM	E.CAPACITOR
	CA213	QEN41EM-475	NP.E.CAPACITOR
	CNA01	QMV5004-007	CONNECTOR

⚠	REF.	PARTS NO.	PARTS NAME
	CNA02	QMV5004-006	CONNECTOR
	ICA01	HA12088ANT	DOLBY NR I.C
	LA101	VQZ0034-002	MPX FILTER
	LA102	VQZ0013-001S	FILTER
	LA201	VQZ0034-002	MPX FILTER
	LA202	VQZ0013-001S	FILTER
	RA01	QRD161J-100	CARBON RESISTOR
	RA02	QRD161J-100	CARBON RESISTOR
	RA03	QRD161J-222	CARBON RESISTOR
	RA04	QRD161J-203	CARBON RESISTOR
	RA05	QRD161J-103	CARBON RESISTOR
	RA101	QRD161J-222	CARBON RESISTOR
	RA102	QRD161J-472	CARBON RESISTOR
	RA105	QRD161J-682	CARBON RESISTOR
	RA106	QRD161J-332	CARBON RESISTOR
	RA107	QRD161J-102	CARBON RESISTOR
	RA108	QRD161J-683	CARBON RESISTOR
	RA109	QRD161J-101	CARBON RESISTOR
	RA201	QRD161J-222	CARBON RESISTOR
	RA202	QRD161J-472	CARBON RESISTOR
	RA205	QRD161J-682	CARBON RESISTOR
	RA206	QRD161J-332	CARBON RESISTOR
	RA207	QRD161J-102	CARBON RESISTOR
	RA208	QRD161J-683	CARBON RESISTOR
	RA209	QRD161J-101	CARBON RESISTOR

12 Exploded View of Enclosure Component Parts and Parts List



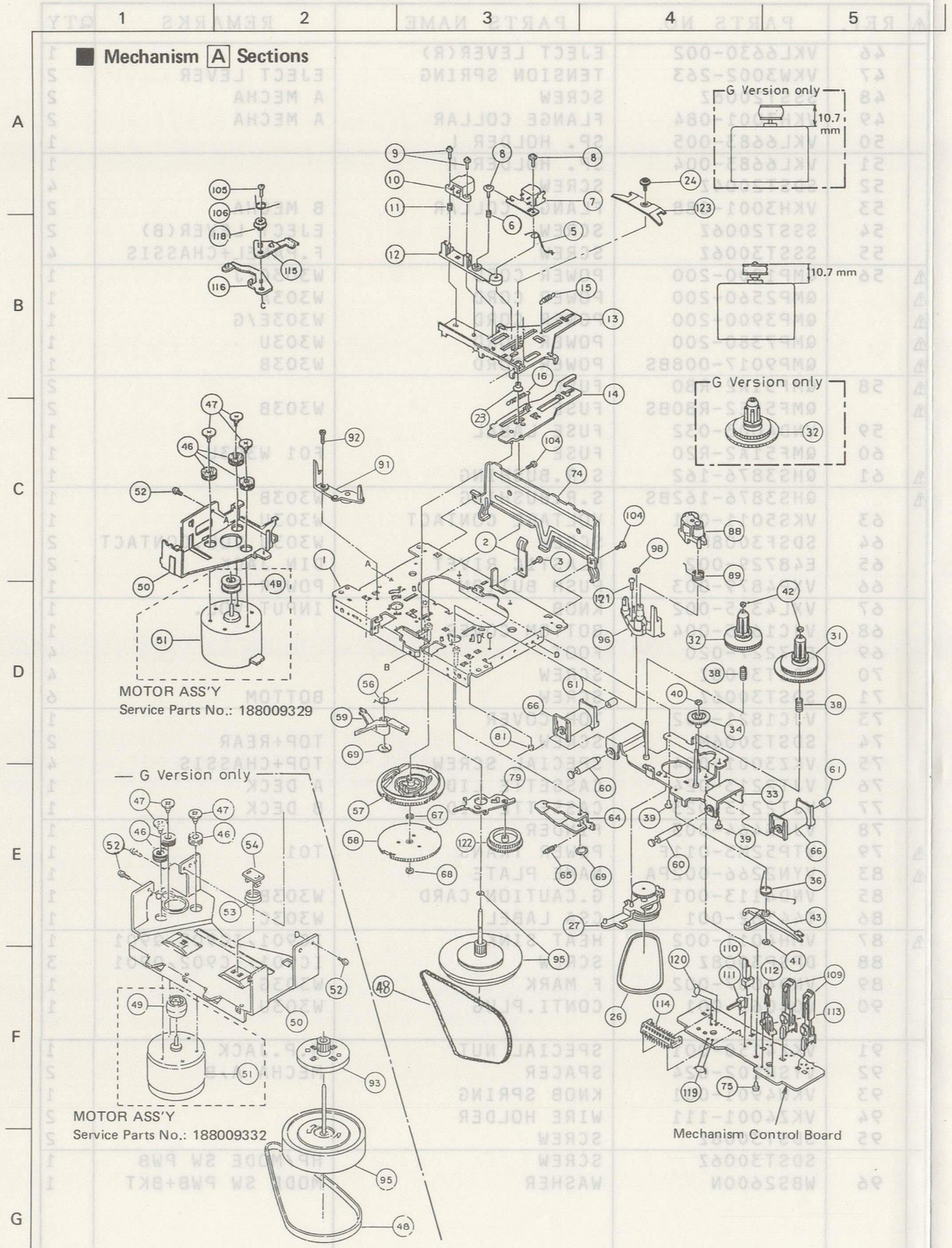
■ Enclosure Component Parts List

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1,2,3,78	ZCTDW303J-FBK	FRONT PANEL ASS'Y	TD-W303C/J SERVICE PARTS	1
		ACTDW303K-FBK	FRONT PANEL ASS'Y		1
	14, 16	ZCTDW303K-CH-A	CASSETTE HOLDER ASS'Y		1
	15, 16	ACTDW303K-CH-B	CASSETTE HOLDER ASS'Y		1
	1	VJC1847-013UL	FRONT PANEL	W303C/J	1
		VJC1847-014	FRONT PANEL	W303A/B/E/G/U	1
	2	VJD4024-001	REFLECTION PLAT		2
	3	VJD5210-008	LED PLATE		1
	4	VXP4349-00A	PUSH BUTTON		2
	5	VKW3001-063	COMP.SPRING	P.BUTTON ASS'Y	2
	6	E72968-001	JVC MARK		1
	7	VKL6751-001	MECHA BRACKET		2
	8	VXP3320-004	MECHA BUTTON		1
	9	VXP3320-005	MECHA BUTTON		1
	10	SDSF2608Z	SCREW	MECHA BUTTON	4
	11	VXP4878-002	DUBBING BUTTON		1
	12	SDSF2608Z	SCREW	DUBBING BUTTON	2
	13	SSSP3006N	SCREW	MECHA BKT	4
	14	VJT2212-001	C.HOLDER ASS'Y	A DECK	1
	15	VJT2212-002	C.HOLDER ASS'Y	B DECK	1
	16	VKY4180-001	CASSETTE SPRING		4
	17	VYH5601-002	GEAR		2
	18	VYH5602-002	DAMP HOLDER		2
	19	SBSF3008Z	SCREW	DUMP HOLDER	2
	20	VKY4563-002	H SPRING	A DECK	1
	21	VKY4563-001	H SPRING	B DECK	1
	22	SDST2604Z	SCREW	HOLDER SP.	2
	23	VKL6631-001	POWER BRACKET		1
	24	LPSP3006Z	SCREW	POWER SW	1
	25	SDST2606Z	SCREW	M BKT+SP HOLDER	2
		SDST2606Z	SCREW	MODE SW	2
		SDST2606Z	SCREW	INPUT PWB+BKT	1
	26	SSSF3010Z	SCREW	POWER BKT	3
	27	SBSF3008Z	SCREW	MECHA	8
	28	VKL6625-001	COUNTER BRACKET		1
	29	VKC5191-001T	TAPE COUNTER		1
	30	VKB3000-136	BELT		1
	31	SBSF2604Z	SCREW	COUNTER+BKT	2
	32	SSSF3010Z	SCREW	COUNTER BKT	2
	33	SBSF2608Z	SCREW	MECHA PWB	4
	34	VJC2368-009	REAR PANEL	W303A/B/C/E/J	1
		VJC2368-010	REAR PANEL	W303U	1
		VJC2368-011	REAR PANEL	W303G	1
	35	VKL2388-002	SIDE CHASSIS		2
	36	SDST3006M	SCREW	REAR+CHASSIS	2
	37	SDST3006M	SCREW	REAR+TRANS	4
	38	SDSF3008M	SCREW	DCS JACK	1
	39	SDSF3008M	SCREW	PIN JACK	1
	40	SDSF3008M	SCREW		2
	41	SDST3006Z	SCREW	CHASSIS+PWB	1
	42	WBS3000N	WASHER		1
	43	VKL6937-001	AMP BRACKET		1
	44	SDST3006Z	SCREW		1
	45	VKL6629-002	EJECT LEVER(L)		1
	46	VKL6630-002	EJECT LEVER(R)		1
	47	VKW3002-263	TENSION SPRING	EJECT LEVER	2
	48	SSST2006Z	SCREW	A MECHA	2
	49	VKH3001-084	FLANGE COLLAR	A MECHA	2
	50	VKL6683-005	SP. HOLDER L		1
	51	VKL6683-004	SP. HOLDER R		1
	52	SDST2004Z	SCREW		4
	53	VKH3001-088	FLANGE COLLAR	B MECHA	2
	54	SSST2006Z	SCREW	EJECT LEVER(B)	2
	55	SSST3006Z	SCREW	F.PANEL+CHASSIS	4
⚠	56	QMP1200-200	POWER CORD	W303C/J	1
⚠		QMP2560-200	POWER CORD	W303A	1
⚠		QMP3900-200	POWER CORD	W303E/G	1
⚠		QMP7380-200	POWER CORD	W303U	1
⚠		QMP9017-008BS	POWER CORD	W303B	1
⚠	58	QMF51A2-R80	FUSE		2
⚠		QMF51E2-R80BS	FUSE	W303B	2
	59	VND4003-032	FUSE LABEL		1
	60	QMF51A2-R20	FUSE	F01 W303U	1
⚠	61	QHS3876-162	S.R.BUSHING		1
⚠		QHS3876-162BS	S.R.BUSHING	W303B	1
	63	VKS5011-001	VOLTAGE CONTACT	W303U	1
	64	SDSF3008M	SCREW	W303U VOL.CONTACT	2
	65	E48729-002	PLASTIC RIVET	DIN JACK	2
	66	VXP4879-003	PUSH BUTTON	POWER SW	1
	67	VXL4335-002	KNOB	INPUT VOL.	1
	68	VJC1695-004	BOTTOM COVER		1
	69	E47227-020	FOOT		4
	70	SDST3008Z	SCREW		4
	71	SDST3006Z	SCREW	BOTTOM	6
	73	VJC1821-002	TOP COVER		1
	74	SDST3006M	SCREW	TOP+REAR	2
	75	VKZ3001-004	SPECIAL SCREW	TOP+CHASSIS	4
	76	VJT2213-024	CASSETTE LID	A DECK	1
	77	VJT2213-023	CASSETTE LID	B DECK	1
	78	VJK3464-003	FINDER		1
⚠	79	VTP52M3-011F	POWER TRANS	T01	1
⚠	83	VYN2266-002PA	NAME PLATE		1
	85	VND4113-001	G.CAUTION CARD	W303B	1
	86	T44362-001	CSA LABEL	W303C	1
⚠	87	VMH4011-002	HEAT SINK	IC901,IC902,Q901	1
	88	DPSP3008Z	SCREW	IC901,IC902,Q901	3
	89	VND4037-002	F MARK	W303G	1
	90	V04062-001	CONTI.PLUG	W303U	1
	91	VKZ4150-001	SPECIAL NUT	H.P.JACK	1
	92	VYSR102-024	SPACER	MECHA A,B	2
	93	VKW4901-001	KNOB SPRING		1
	94	VKZ4001-111	WIRE HOLDER		2
	95	SDST3006Z	SCREW		2
		SDST3006Z	SCREW	HP/MODE SW PWB	1
	96	WBS2600N	WASHER	MODE SW PWB+BKT	1

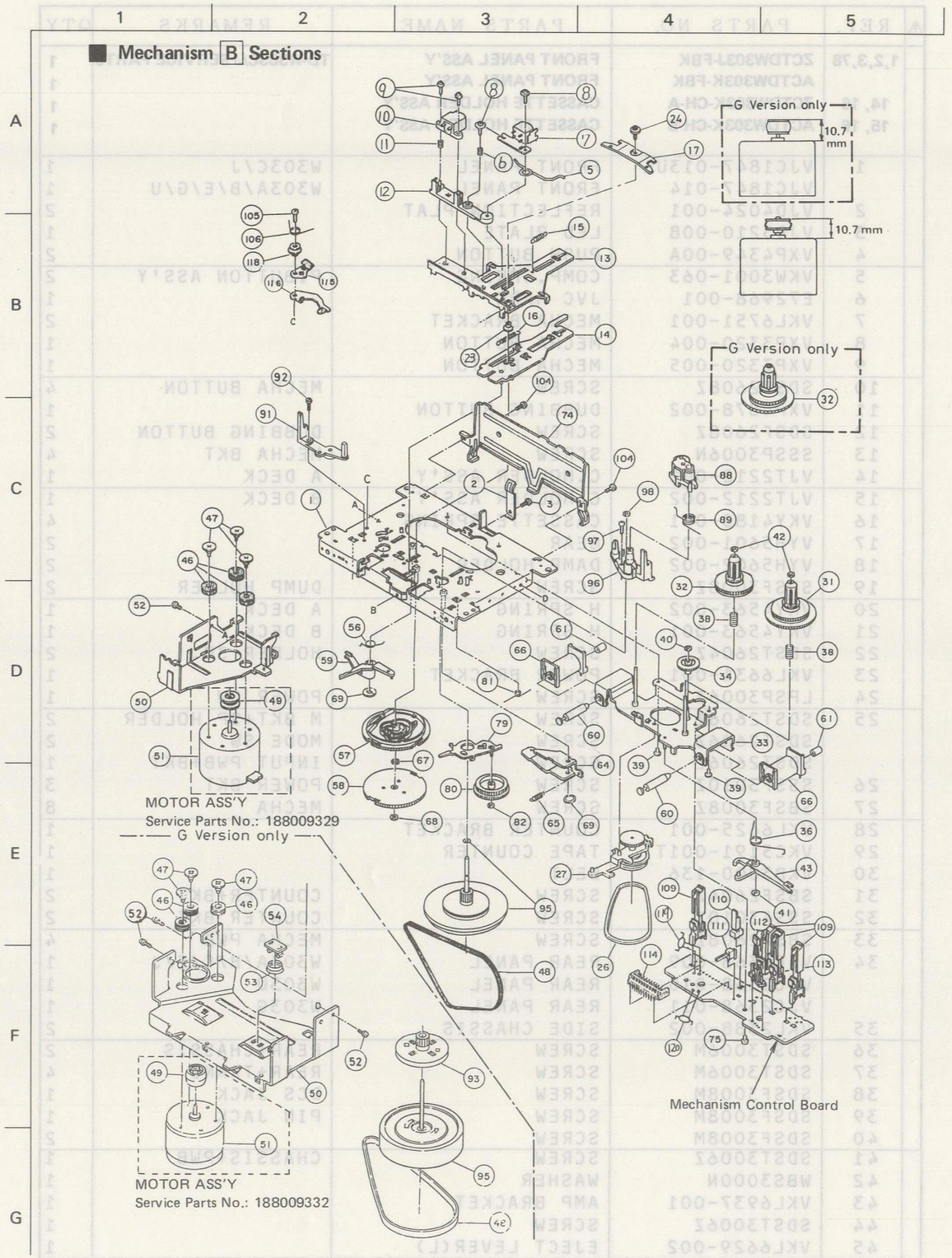
TD-W303A/B/C/E/G/J/U

13 Exploded View of Mechanism Component Parts and Parts List

■ Mechanism [A] Sections



■ Mechanism [B] Sections



■ Mechanism [A] Component Parts List

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	49,51	**188009329**	**MOTOR ASS'Y**	**FOR SERVICE PARTS**	**1**
	49,51	**188009332**	**MOTOR ASS'Y**	**TD-W203G ONLY**	**1**
	1	188001501T	CHASSIS ASS'Y		1
	2	18800102T	PACK SPRING		1
	3	91780000T	SCREW		1
	5	18800406T	PINCH R.SPRING		1
	6	18210307T	AZIMUTH SPRING		1
	7	VGH0421-020	R/P HEAD		1
	8	92210000	SCREW		2
	9	92250000	SCREW		2
	10	62011303T	HEAD	DUMMY	1
	11	18210308T	SPRING		1
	12	18800208T	HEAD BASE		1
	13	18800207T	HEAD PANEL(A)		1
	14	188002501T	H.PANEL(B)ASS'Y		1
	15	18800204T	RC SPRING		1
	16	18800205T	PANEL SPRING		1
	23	18800219T	PANEL COLLAR		1
	24	99991816T	SCREW		1
	26	18800707T	RF BELT		1
	27	188007302T	RF CLUTCH ASS'Y		1
	31	188005301T	T-UP REEL ASS'Y		1
	32	188005302T	SUPPLY REEL ASS'Y		1
	33	188005501T	REEL BASE ASS'Y		1
	34	18800508T	FF GEAR		1
	36	18800517T	TENSION SPRING	FR TRIGGER ARM	1
	38	18800522T	SPRING	BACK TENSION	2
	39	91800000T	SCREW		2
	40	94210000T	P.WASHER		1
	41	99997004T	WASHER		1
	42	99997003T	HL WASHER		2
	43	18800515T	RF TRIGGER ARM		1
	46	18211266T	MOTOR RUBBER		3
	47	18511418T	COLLAR SCREW	FOR MOTOR	3
	48	18800944T	MAIN BELT		1
	48	18800941T	MAIN BELT	TD-W203G ONLY	1
	49	18800937T	MOTOR PULLEY		1
	49	18800940T	MOTOR PULLEY	TD-W203G ONLY	1
	50	18800950T	MOTOR BRACKET		1
	50	18800913T	MOTOR BRACKET	TD-W203G ONLY	1
	51	60050342T	MOTOR	MMI-6H2LWK	1
	52	91800000T	SCREW		1
	53	18201310T	DAMPER SPRING	TD-W203G ONLY	1
	54	18201302T	FL PATCH PLATE	TD-W203G ONLY	1
	56	18800106T	SPRING	M.TRIGGER ARM	1
	57	18802115T	M GEAR		1

⚠ Parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	58	18802116T	RF CAM GEAR		1
	59	18802103T	M TRIGGER ARM		1
	60	18802105T	PLUNGER		2
	61	18802106T	PLUNGER HOLDER		2
	64	188021503T	P K.LEVER ASS'Y		1
	65	18802111T	SPRING	P.KICK LEVER	1
	66	18802113T	SOLENOID		2
	67	95020000T	E.RING		1
	68	99997006T	WASHER		1
	69	99997004T	WASHER		2
	74	18805302T	SW PROTECTOR		1
	75	91800000	S TAPPING SCREW		1
	79	188005502T	T GEAR ARM ASSY		1
	81	18800518T	SPRING	T.GEAR ARM	1
	88	188004301T	P.R. ARM(F) ASY		1
	89	18800403T	P ARM F SPRING		1
	91	18800107T	TAPE GUIDE		1
	92	91820000	C TAPPING		1
	93	18800903T	FL GEAR(G)	TD-W203G ONLY	1
	95	188009307T	FLYWHEEL ASS'Y		1
	95	18800916T	FLYWHEEL ASS'Y	TD-W203G ONLY	1
	96	18800908T	FL METAL ASS'Y		1
	98	99997007T	WASHER		1
	104	91800000T	SCREW		2
	105	99991404T	S TAPPING SCREW		1
	106	18801309T	E STOPP. SPRING		1
	109	640101173T	LEAF SWITCH		2
	110	640101174T	LEAF SWITCH		1
	111	640101175T	LEAF SWITCH		1
	112	DN6851A	HALL IC		1
	113	18805303T	IC PROTECTOR		1
	114	68150207T	CONNECTOR		1
	115	18801301T	E STOPPER A(F)		1
	116	18801302T	E STOPPER B(F)		1
	118	18801305T	COLLAR		1
	119	QRD161J-561	C.RESISTOR	560 Ω 1/6W	1
	120	QRD161J-222	C.RESISTOR	2.2 kΩ 1/6W	1
	121	91820000T	SCREW		1
	122	188005502T	T.GEAR		1
	123	18800216T	PANEL SPRING PLATE		1
	124	99996003T	WASHER		1

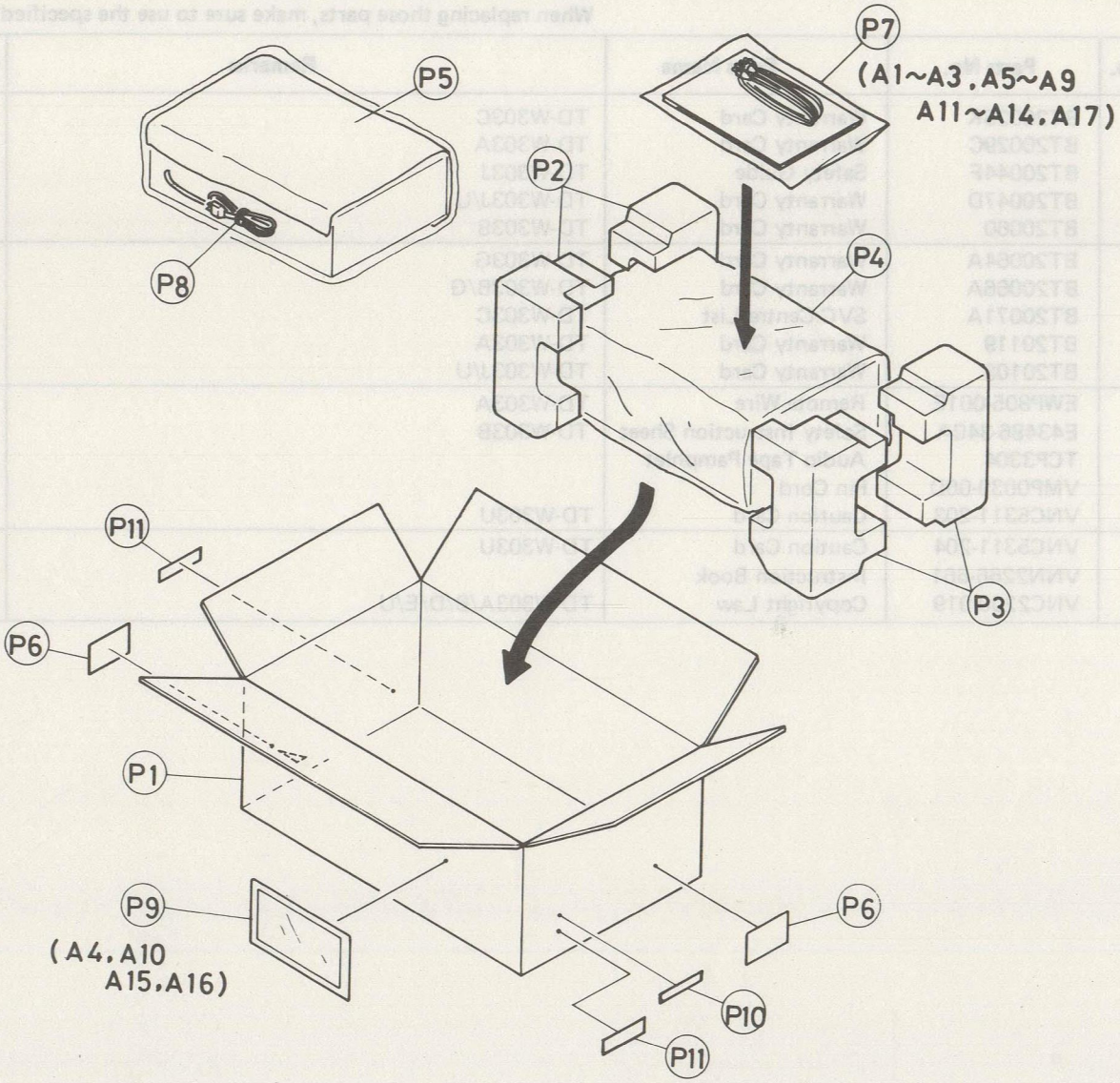
■ Mechanism [B] Component Parts List

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	49, 51	**188009329**	**MOTOR ASS'Y**		**1**
	49, 51	**188009332**	**MOTOR ASS'Y**	**TD-W303G ONLY**	**1**
	1	188001501T	CHASSIS ASS'Y		1
	2	18800102T	PACK SPRING		1
	3	91780000T	SCREW		1
	7	18650228T	COLLAR		2
	8	186502306T	H.BASE ASS'Y		1
	9	18805380T	RELAY BOARD		1
	10	99991817T	SCREW		2
	11	18650961T	SPACER		1
	12	18650249T	WIRE CLAMP		1
	13	18800201T	HEAD PANEL(A)		1
	14	188002501T	H.PANEL(B)ASS'Y		1
	15	18800204T	RC SPRING		1
	16	18800205T	PANEL SPRING		1
	17	18800206T	CHP LEVER		1
	18	18800405T	P.ROLL.SPRING		1
	19	62040606T	HEAD		1
	20	90780000T	ASS'Y SCREW		1
	21	95470000T	MINI SCREW		2
	22	99992020T	SCREW		1
	23	18800219T	PANEL COLLAR		1
	24	99991816T	SCREW		1
	25	18650260T	CLAMP SPRING		1
	26	18800708T	RF BELT		1
	27	188007302T	RF CLUTCH ASS'Y		1
	28	18650257T	SHIELD PLATE		1
	29	91170000T	SCREW		1
	31	188005301T	T-UP REEL ASS'Y		1
	32	188005302T	SUPPLYREEL ASSY		1
	33	188005501T	REEL BASE ASS'Y		1
	34	18800508T	FF GEAR		1
	36	18800517T	TENSION SPRING		1
	38	18800522T	SPRING		2
	39	91800000T	SCREW		2
	40	94210000T	P.WASHER		1
	41	99997004T	WASHER		1
	42	99997003T	HL WASHER		2
	43	18800515T	RF TRIGGER ARM		1
	46	18211266T	MOTOR RUBBER		3
	47	18511418T	COLLAR SCREW		3
	48	18800938T	MAIN BELT		1
	48	18800941T	MAIN BELT	TD-W303G ONLY	1
	49	18800937T	MOTOR PULLEY		1
	49	18800940T	MOTOR PULLEY	TD-W303G ONLY	1
	50	18800911T	MOTOR BRACKET		1
	50	18800913T	MOTOR BRACKET	TD-W303G ONLY	1

⚠ Parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	51	60050342T	MOTOR		1
	52	91800000T	SCREW		1
	53	18201310T	DAMPER-SPRING	TD-W303G ONLY	1
	54	18201302T	FL PATCH PLATE	TD-W303G ONLY	1
	56	18800106T	SPRING		1
	57	18802115T	M GEAR		1
	58	18802116T	RF CAM GEAR		1
	59	18802103T	M TRIGGER ARM		1
	60	18802105T	PLUNGER		2
	61	18802106T	PLUNGER HOLDER		2
	62	188021501T	CH S.LEVER ASSY		1
	63	18802108T	SPRING		1
	64	188021503T	P K.LEVER ASS'Y		1
	65	18802111T	SPRING		1
	66	18802113T	SOLENOID		2
	67	95020000T	E.RING		1
	68	99997006T	WASHER		1
	69	99997004T	WASHER		2
	74	18805302T	SW PROTECTOR		1
	75	91800000T	SCREW		1
	79	188005502T	T GEAR ARM ASSY		1
	80	18800535T	T GEAR		2
	81	18800518T	SPRING		1
	82	94210000T	P.WASHER		2
	83	188005503T	T G. ARM(R)ASSY		1
	84	18800519T	SPRING		1
	88	188004301T	P.R. ARM(F) ASY		1
	89	18800403T	P ARM F SPRING		1
	90	188004302T	P.ROLL A.(R)ASY		1
	91	18800404T	P ARM R SPRING		1
	93	18800903T	FL GEAR(G)	TD-W303G ONLY	1
	95	188009307T	FLYWHEEL ASS'Y		1
	95	18800916T	FLYWHEEL ASS'Y	TD-W303G ONLY	1
	96	18800908T	FL METAL ASS'Y		1
	97	91820000T	SCREW		2
	98	99997007T	WASHER		1
	100	188009308T	FLYWHEEL(R)ASY.		1
	101	18800909T	FL METAL ASS'Y		1
	102	99997006T	WASHER		1
	104	91800000T	SCREW		2
	105	99991404T	S TAPPING SCREW		1
	106	18801309T	E STOPP. SPRING		1
	109	640101173T	LEAF SWITCH		5
	110	640101174T	LEAF SWITCH		1
	111	640101175T	LEAF SWITCH		1
	112	DN6851A	HALL IC		1
	113	18805303T	IC PROTECTOR		1
	114	68150207T	CONNECTOR		1
	115	18801306T	E STOPPER A (R)		1
	116	18801307T	E STOPPER B (R)		1
	118	18801305T	COLLAR		1
	119	68040506T	C. RESISTOR	560Ω 1/6W	1
	120	68040505T	C. RESISTOR	2.2kΩ 1/6W	1

14 Packing Illustration and Packing Parts List



■ Packing Parts List

⚠ Parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	P1	VPC2266-002	Carton		1
	P2	VPH2369-001	Cushion (L)		1
	P3	VPH2370-001	Cushion (R)		1
	P4	VPE3005-026	Poly Bag	for Unit	1
	P5	TKS000501-08	Sheet	for Unit	1
	P6-1	VND3044-001	Serial Ticket (White)	TD-W303A	1
	P6-2	VND3044-001	Serial Ticket (White)	TD-W303U	1
	P6-3	VND3044-002	Serial Ticket (Orange)	TD-W303J	2
	P6-4	VND3044-003	Serial Ticket (Blue)	TD-W303E	1
	P6-5	VND3044-004	Serial Ticket (Green)	TD-W303B	1
	P6-6	VND3044-005	Serial Ticket (Red)	TD-W303G	1
	P6-7	VND3044-006	Serial Ticket	TD-W303C	2
	P7	VPE3005-007	Poly Bag	for Instruction Book	1
	P8	Q04141H	Wire Clamp		1
	P9	E66416-003	Envelope	TD-W303J/U	1
	P10	VND4909-001	Voltage Label	TD-W303U	1
	P11	VND3029-028	Bar Cord Label	TD-W303B	2

15 Accessories

⚠ Parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	A1	BT20025K	Warranty Card	TD-W303C	1
	A2	BT20029C	Warranty Card	TD-W303A	1
	A3	BT20044F	Safety Guide	TD-W303J	1
	A4	BT20047D	Warranty Card	TD-W303J/U	1
	A5	BT20060	Warranty Card	TD-W303B	1
	A6	BT20064A	Warranty Card	TD-W303G	1
	A7	BT20066A	Warranty Card	TD-W303B/G	1
	A8	BT20071A	SVC Centre List	TD-W303C	1
	A9	BT20119	Warranty Card	TD-W303A	1
	A10	BT20108	Warranty Card	TD-W303J/U	1
	A11	EWP805-001E	Remote Wire	TD-W303A	1
	A12	E43486-340A	Safety Instruction Sheet	TD-W303B	1
	A13	TCP3304	Audio Tape Pamphlet		1
	A14	VMP0039-00D	Pin Cord		1
	A15	VNC5311-203	Caution Card	TD-W303U	1
	A16	VNC5311-204	Caution Card	TD-W303U	1
	A17	VNN2266-661	Instruction Book		1
	A18	VNC2200-019	Copyright Law	TD-W303A/B/D/E/U	1

JVC
VICTOR COMPANY OF JAPAN, LIMITED.
AUDIO PRODUCTS DIVISION MAEBASHI PLANT 10-1, 1-chome, Ohwatari-cho, Maebashi-city 371, Japan

Printed in Japan
—H0202—S—